Sorry, senor



but I have never heard of Atari

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NEW ATARI USER

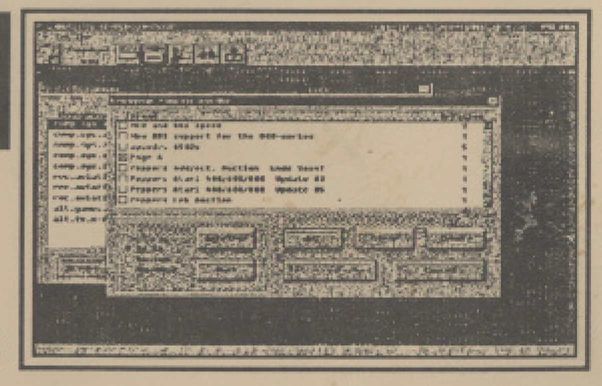
The Resource for the ATARI CLASSIC and the ATARI ST

Issue 80 - January/February 1997 £2.50

FOR THE ATARI CLASSIC

- ***SECTOR EDITOR***
  A great new utility for manipulating your disks
- ***INTERNET***
  Seeking information concerning Classic games
- ***UNDER A TON***
  A new Epson 24-pin printer

THE WIDER SCENE



FINDING PAGE 6 ON THE INTERNET

DO YOU NEED WINDOWS TO BUY A PRINTER?

PLUS ... NEW PROGRAMMING UTILITIES - GTIA SOUND - THE TIPSTER - ST PUBLIC DOMAIN ... AND MORE!

This issue's ....

Thanks

Les Ellingham puts it all together and fills up the gaps but the real thanks goes to the following who made this issue possible

Sandy Ellingham who takes care of all the office work, advertising and mail order

For their contributions this issue

John S Davison
John Robinson
Richard Gore
Dean Garraghty
John Foskett
Gary Manosky
M Tomlin
Gordon F. Hooper
Kevin Cooke

APOLOGIES

I am still extremely poor in acknowledging contributions so I apologise to everyone who has sent in stuff and thought it has gone through the wormhole. The intention to reply to everyone is there but the time seems to drift by. If you have not heard, thank you and keep watching the mag, you might be surprised.

HOW IT'S DONE

PAGE 6 shows just what you can do with your Atari. NEW ATARI USER has always been created entirely with Atari equipment, initially on the XL but more lately with a Mega ST and other stuff, who needs PC's or Macs! Hardware includes a Mega ST2 (upgraded to 4Mb), SM125 Monitor, Supra 30Mb Hard Disk, a HP Laserjet III, Citizen 124D printer, Philips CM8833 monitor, 130XE, a couple of 1050 disk drives, 850 interface, NEC 8023 printer. Principal software used is Protext and Fleet Street Publisher 3.0. Other software includes Kermit, TariTalk, Turbo Basic and various custom written programs on the XL/XE. Articles submitted on XL/XE disks are transferred across to the ST via TARITALK. Programs are coded on the XE and printed out directly for pasting in after the typesetting is completed. All major editing is done with Protext and pages are laid out with Fleet Street Publisher. Each page is output directly from Fleet Street to a HP Laserjet III which produces finished pages exactly as you see them. All that is left is to drop in the listings and photos.

Well, it's not quite as easy as that but you get the idea!

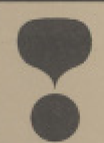
Inspiration

A few weeks ago BBC2 had a 'Country Night' which proved to be quite interesting, particularly those bits that had nothing to do with Country music! Easily the best program was a documentary about Kathy Mattea and Dougie MacLean which featured many new songs from Kathy Mattea which I had not heard before. Then a week or so ago I wandered into Our Price to see a new Kathy Mattea CD which had those songs on and the mortgage payments had to be put back a month so I could get it. That's what's playing now and has formed the main listening of this issue. Robin Williamson has also had a hand but I am a little depressed to have received a mailing detailing some limited edition CD releases from Robin which I can't afford. The Tories mythical recovery is still with us, still the bright light on the horizon is that in only a couple of months they will be gone. Nothing much may change but at least there will be hope.

CONTRIBUTIONS

Without contributions from its readers, NEW ATARI USER would not be possible. PAGE 6 welcomes and encourages its readers to submit, articles, programs and reviews for publication. Programs must be submitted on disk or cassette, articles should wherever possible be submitted as text files on disk. We seek to encourage your participation and do not have strict rules for submissions. If something interests you, write a program or article and submit it!

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Editorial

As we begin a new year and find that one or two people are reluctant to renew their subscriptions because they are unsure of the future, my thoughts have turned to how long New Atari User might last. Thinking things through I reckon we have at least another two years at our normal output of six issues a year, that's another dozen chances for you to have something published before it's too late!

One thing that worries many users is whether they might lose their money should we suddenly decide to stop publishing. Many old hands would have experienced losses with Antic and Analog who did just that and more recently with Atari Classics who did their best to reimburse subscribers, but gave overseas supporters rather less of a good deal. My intentions are to give you adequate notice when the time comes, to set a date for the last issue at least twelve months ahead and then invite to renew for whatever issues remain. That way you can't lose out. But that is in the future and talking about it now is rather premature as there are at least another six issues before such an announcement. That means six issues to fill with interesting articles, programs, reviews and anything else. I am sure that we can rely on those regular contributors whose work has been featured during the last year to come up with something new, but we also need articles and programs from as many of you as possible who either have not contributed before or maybe not for some years. ***Keep sending your contributions***, we have another two years of issues to fill (at least!) and ***keep renewing your subscriptions*** (until we tell you otherwise!).

Les Ellingham

NAU INTERNET CONTACT LIST

The following is a list of NAU readers who'd welcome e-mail from other Atari users. If you'd like to be added to this list please drop me an e-mail note at the address shown.

Daniel Baverstock	dbaverstock@mistral.co.uk
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Henning Wright	kofta@algonet.se
Bryan Zillwood	b.j.zillwood@exeter.ac.uk

PRINTER REVIEW

UNDER A TON

Need a new printer? John Robinson reviews his latest purchase - the Epson LQ-100+ - which is a 24-pin printer that can be used with the Atari Classic as well as the ST. What's more it's amazingly cheap!

I was most interested in the feature article by Kevin Cooke in Issue 78 of New Atari User primarily because I use an 800XL Classic for all my word processing, and I am a regular contributor to a Vintage Collectors magazine. Way back in 1987, I bought a Panasonic KX-P1081, which I reviewed for Page 6 in Issue 33.

Recently, the Panasonic fell ill. Not, very probably, any terminal affliction - if one had the nous to delve about a bit in the electronics it could probably be fixed but then I do not. Anyhow, it would print around six or seven lines, then skip about two dozen or so. So what to do?

Repair by experts springs to mind but unfortunately, finding one is not easy. Compumart, where I bought the machine, seem to have vanished, Derek Fern failed to reply to my message of distress. Others quoted fantastic sums, like £35.00 just to unpack the thing - any work done/parts used would be charged extra, as would carriage and insurance both ways - all plus VAT. All this adds up to a hell of a lot of dosh so could I find another printer which would work with the 8-bit? Would it permit the use of Atariwriter+? Could I afford it anyway?

TANDY OF ALL PLACES!

Mooching morosely round the shops, I chanced to visit Tandy, where a quite charming young lady introduced me to the Epson LQ-100+, a 24 pin Dot Matrix machine which has a lot going for it. First it is genuine Letter Quality, none of your "NLQ" rubbish. Secondly, I was assured that connection to the 8-Bit Classic via my Graphix A-T interface was viable. Thirdly, it is a genuine 8-bit machine. Fourthly, it has graphics capability, and final-

ly at £88.00 it costs less than the potential repair!

The specifications are impressive: Print speed - 200 cps draft, 72 cps LQ, six resident fonts, four of which are selectable to 10cpi/12cpi/15cpi, the other two, prestige and script, select to 10 and 12cpi only. The character tables and international character sets, plus a legal character set, are all selectable by software command. The machine defaults to the U.S.A. character set, but this may be easily re-set to any one of fifteen default sets! The default fonts are accessed by a press switch on the (very simple, two-switch) control panel.

MATCHING COLOUR

Mechanically, we have a compact little machine, 5" high, 15" wide, 10 " deep and weighing in at around 10 lb. Coloured a greyish white, it is very similar to the Classic coloration. It comes with about 5ft of cable, with a 13a plug fitted, also greyish. The projected ribbon cartridge life is 2 million characters, which, at £3.50 a time, is not bad. The Print Head is expected to make 100 million strokes before expiring, and the MTBF life expectancy is 4000 power-on hours. The standard parallel interface socket accepts my Graphics A-T without protest. It is possible to use paper from 148mm to 257mm wide and up to 0.18mm thick.

Two sheets, one original - one copy, may be fed through the tractor, but only one sheet manually. Envelopes and labels are acceptable with care, although paper must not exceed 100 GSM. Lastly, the printer works either laid flat or standing vertically!

Available via software command (Control 'O')27, etc.),(although the handbook lists ASCII, Decimal and Hexadecimal alternatives), are over 100 different functions. The most useful to me include: Page eject, Line Spacing, Top and Bottom Margins, Left and Right Margins, Page Length in lines/inches, Select Italic, Bold, Proportional, Condensed, Double Width or Height, Superscript or Subscript Fonts, with Underline, Strikethrough, and Overscore - the Score Line can be Single or Double Continuous/Single or Double Broken Line. Then we have a selection of Character Styles - Normal, Outline, Shadow, and Outline/Shadow. There are, of course, many more which I neither use nor, really, understand!

As regards Character Handling, surprise, surprise, *no dip switches!* Nonetheless, available via software are 18 Character Tables, including Greek, Turkish, Cyrillic, Arabic, and Russian. The default International Character set is the U.S.A. set and, as yet, the only way I have found to reset this is via software command, which is lost when the micro is closed down. However, there are 14 Character Sets, including Spanish, French, Japanese, Korean, and Latin American, and, in addition, one called "Legal"!

A LITTLE AWKWARD

Now for the downside. The print head is not visible when in work, preventing adjustment to pre-ruled lines (as in form filling), although the top margin can be extended by turning a wheel, after lifting the cover. There is no easy manual adjustment to the roller, (as with a typewriter). To my surprise, the printer came

EPSON review continued

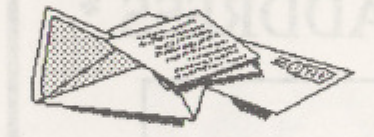
with a sheet feeder cassette, but no tractor, (which is extra - a lot extra!). The Feeder Cassette will only accept A4 and A5 sheets, although other sizes can be fed manually.

ADEQUATE MANUAL

The 'User's Guide' is generally quite good - well written and presented, clear index, good illustrations where needed, but the usual problem of not being ring bound nor lay flat. Composed (I suppose rightly) with the PC user in mind, there are fourteen pages of ESC commands which are largely incomprehensible to me. A glossary informs me that ESC means 'Epson Standard Code'! and while Control Commands will access the default values to make changes, these are lost when the micro is switched off. A quick 'phone call to our N.A.U. guru, Les Ellingham, did not elicit a lot of help, (I think he had other things on his mind that day!). The alleged helpline to Epson was a complete waste of time - fifteen tries in one day were either ignored entirely or the receiver was lifted and put down, cutting off the call. A letter has produced a reply which explains how to access the Hex Dump Mode, then refers me to the Users Manual. This matter is proceeding!

All in all, a decent printer, of accepted industry standard, at an affordable price. Well capable of producing very neat work for school, college or Aunties weekly letter, I would suggest a place could also be found with the amateur author, producing a thousand words or so per week. Despite the apparent lack of back-up from the makers, I commend the LQ-100+ to your attention. ●

Mailbag



NOT SO BUMPER MAILBAG!

Doesn't seem to be a great number of letters in the Mailbag tray this time but those that are there seem to be quite interesting, so let's get going on another Mailbag column.

As always, once you have read this column why not follow up with a letter for the next issue or start a new topic of conversation?

Les Ellingham

MORE INTERNET CONTACTS

Johnny Chan, whose Stars Database featured as our Disk Bonus a few issues back, wants to let you know about contacting him on the Internet. He writes 'Replying to the NAU Internet Contact list, I wish to have my email address published, as I would welcome fellow Atarians to contact me.

I also have a home page which contains a page about the Atari Classic computer. This will be expanding in the near future. Even Page 6 is mentioned briefly, although my site is dominated with the UK lottery. I have owned an Atari since 1985 but haven't totally given up on it even though I have owned a PC for nearly two years. When I get my free upgrade program of PC XFORMER 96 for Windows 95 in the new year (well that's what the supplier said to me!), I may write a review about it for you.'

❢ *All contributions are gratefully received as ever, Johnny, so let's hope that you get that upgrade. Johnny's Internet addresses are:*

Email:
jcwchan@clara.net
Home Page:
http://home.clara.net/jcwchan

MIXED BAG

James Austin has a number of questions that you may be able to answer in the next Mailbag, although I'll try to throw a few comments in as we go. James's letter starts with one of the great characters of the Atari (or any other) world. 'In Issue 55 of NAU you featured Turboflex by Jeff Minter. I also recall an issue (54, I think) in which the ST version of Colourspace was mentioned as being re-released as Shareware. Have the Atari 8-bit Llamasoft programs (Colourspace, Attack of the Mutant Camels, Hovver Bovver etc.) also been released as such? Are they now freely distributable?'

❢ *Jeff Minter kindly sent us in Turboflex out of the blue with permission to use it in the magazine but he did not mention anything about other programs being shareware or PD. As far as I know no permission has been given to distribute Llamasoft programs other than the ST version of Colourspace and I believe that was only issued as shareware because Jeff had an upgraded version commercially available under another name. Jeff must surely be on the Internet so perhaps someone with access could get in touch with him and ask what the status of his 8-bit programs is.*

The next topic is: 'I recently bought a couple of bargains from Micro Discount's Christmas offer. One of these was the VisiCalc spreadsheet package, an excellent program and a bargain at only £2.00 when it retailed at around £150 when it was released. The program was produced by an American company called VisiCorp. Does anyone know if the other 'Visi' programs (VisiTrend, VisiPlot) mentioned in the manual were ever released for the Atari 8-bit machines? I have never seen them mentioned anywhere.'

❢ *I am sure they were released (although I may be getting confused with the similar 'Syn' programs like SynTrend) but were not distributed over here. This goes way back to the beginning of time, as far as Atari is concerned, but maybe someone has a few museum pieces and could let us know?*

James continues with a request on behalf of another Classic owner and asks 'Does anyone know if SuperDOS 5.2 exists in any PD library over here? Does it exist at all? I ask on behalf of Ron Hoffman from the States - he did read somewhere about someone having it in this country.

I heard rumours a little while back about the Atari 400 computer being bought by IBM, supposedly because people were confusing it with their "400" computer. Is this true? Also, who owns the Atari 400/800 and XL range. Is it Atari Inc. (part of Warner communications) or Atari Corp. (now part of the JTS company)? I ask after recently reading a very interesting article in an old Atari magazine. It was all about the Tramiel takeover at Atari, throwing doubt about whether Tramiel actually bought the computers at all - apparently Warner Communications owns (or owned) 32% of Atari Corp's stock! Can anybody throw light on this? Could anybody also explain who actually owns the Atari arcade titles - I though it was Atari Inc. but recently the "old" Atari games such as Millipede and Missile Command have been appearing on the games consoles on certain arcade "classic" carts with "copyright Atari Corp." plastered all over them! Who owns what at Atari?

❢ *You've thrown a few rats among the pigeons there, James! Could it be that all these years we have been blaming Jack Tramiel and it wasn't really his fault! The ways of making money, or trying to avoid losing money, are long and convoluted in big business so who knows what goes on. If there are such things as Computer Historians (and I bet that someone did it for their PhD) then this seems to be right down their street, but I bet no-one will ever know the real truth.*

Criticism time now with 'I would like to draw your attention to a major boob you made concerning the Picture Compression program in Issue 78. The program requires two files to run, VCLOAD.MEM and VCSAVE-.MEM, neither of which is on the Issue 78 disk or the printed listing I obtained. This is a pity since it looks to be a useful program. Is there any way you can put the required files on the Issue 80 disk or make the appropriate listings available?

❢ *Whoops! Sometimes there are so many files on a disk that it is difficult to remember to include them all, or remember which belongs to which. I obviously forgot to test the Picture Compression file once it had been transferred to the master disk, sorry! The missing files will be on this issue's disk and the master of Issue 78 has been upgraded in case anyone wants a copy.*

Finally, James has a suggestion for upgrading a recently published program: 'Regarding John Foskett's Disk Directory Mover in Issue 79, can I suggest to John that he modifies the program to enable an already modified disk to go straight to the menu (bypassing the mods



and formatting) so not having to do all copying in one session, and have a directory option for both normal directories and the relocated one on modified disks? It is irritating since you do not know what has already been copied and what hasn't most of the time. Other than that, I have found the program to be extremely useful in giving my disks that added bit of sparkle.

Many thanks for all the various points raised, this is just the sort of letter we need for Mailbag with something of interest to almost everyone. Now it is other readers turn to supply some answers.

VBI UPDATE

Don't take this as having a go at John Foskett!, far from it we really appreciate his contributions, but Joel Goodwin has a bit of information concerning John's Let's Write a VBI article back in Issue 71.

'In the article John explains that you need to save the contents of the accumulator and X and Y index registers (if you wish to use them) because the 6502 processor must be returned to exactly the same state as it was in before the VBI began. This is not true - not for a VBI. The OS VBI mechanism automatically saves the processor status, accumulator and X and Y registers. John might be being confused with DLI's where the OS protects only the processor status. (If the OS didn't protect the processor status, you would need to use PHP/PLP at the start and end of your interrupt routine). Hope this is of some interest.'

MORE TRUTH NEEDED

You will remember that we featured Kevin Cooke's X-FILES disk in the PD library a couple of issues back and Kevin is looking to carry the project forward in the future - with your help. He writes: 'Since my X-Files disk has been released into your PD library, a further series has started on terrestrial TV (and has already been shown on Sky) thus the disks need updating. At some point (when time allows!) I would like to add a further disk to the set and this is where I need your readers' help. Although anything about the series itself would be helpful, I am particularly interested in readers' UFO sightings, near-death experiences, etc. A contact in Cornwall has already written to me regarding a deja-vu/pastlife(?) experience which he had and this will feature on the update. If anyone reading has had any experiences like this, I would love it if they could send a description on disk for inclusion. By the way, if/when I do create the update, I will update readers' disks for the cost of return postage and a blank disk.'

Kevin also has a suggestion regarding ST coverage in future: 'With respect to the ST section of the magazine, although little new software is being released, why not get someone to review software that was missed such as Cannon Fodder, Street Fighter II, Stario Land etc.? Why not put out a plea for a reader to do this? Readers could review their own software even, perhaps with a reward of an ST PD disk for every review used?'

Well, Kevin you have just put out the appeal. I am quite happy to publish reviews on any ST software that readers think is worth reviewing. The only problem is that the software has to be still available form some source and the review would need to mention where the program could be obtained. Without this a review is only really of academic interest. I believe that 16/32 who used to do a PD library have a lot of commercial games still available, perhaps someone could update us on this and other sources?



HARDBALL INFO

In last issue's Tipster James Mathrick asked for some info on Hardball and John Harrington has some of the answers. He also mentions a few other things of interest so let's print his letter in full.

'I have been a subscriber to Page 6 for many years now but have never written before. Truth is, I have not used my Atari 800XL for about 6 years but I got more than my money's worth out of the machine, and I have continued subscribing to do what I can to support the mag so that others can continue to get enjoyment from the Atari Classic.

This may sound suspiciously philanthropic of me but I shall always be grateful to Page 6 for a tip they printed about fixing disk drives (the old roughing up the pad with a paper clip trick that solves the "read but won't write" problem). The first time this happened to my disk drive I sent it off to Silica Shop to be fixed and they charged about £70 for the service. Not that I was complaining at the time as they were about the only people still supporting the XL and so I was just grateful that they could fix it. The next time it happened I got out the paper clip and saved myself £70. I therefore think your magazine deserves some goodwill.

The good news is that I now have a 6 year old son who has taken possession of the XL so I have started using it again. The bad news is that whilst it loads ROMs, it won't load stuff from disk or cassette. I suspect there is something amiss with the socket; I'll send it off to Micro Discount to see if Derek can fix it.

If I get it fixed I'll probably be tempted to use it on those occasions when my son elbows me off my PC. I've yet to play a better game than Rails West! on any format, although Railroad Tycoon runs it close, but having got used to a hard drive on my PC I'm not sure if I'll be able to go back to the agonies of disk swapping and floppy disk access times. Hopefully Rails West will work on the Atari XL emulator on the PC.

Another of my favourite games is Hardball. I noted that for many months you had it on your clearance list and I was half tempted to write in and tell people how good it is. I guess many were deterred by the subject matter. I note, for instance, that one of your correspondents in the Tipster does not know what some of the acronyms are on the Player Stats. I am by no means an expert on baseball but I can help him out with the acronyms.

AB - At Bat
The number of times that a batter comes up to the plate. Equivalent to number of innings for a cricketer.

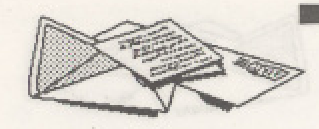
HR - Home Runs
Most people know what this is. It's where the batter knocks the ball into the crowd and therefore can run round all four bases on one hit.

RBI - Runs Batted In
The aim of the game in baseball is to get back to home base. This stat is a measurement of the number of times that this batter hit a ball that allowed batters to get back to home base.

SB - Stolen Bases
To steal a base is to run to the next base from a pitch that was not hit by the batter. A high SB rating indicates that the player is a speedster and it might be therefore be worthwhile trying to steal a base with him if the match situation demands it.

For the pitcher the key stat is **ERA** - *Earned Runs Average*. This is basically a measurement of how many runs were scored from this player's pitches excluding any that were the result of misfields. Baseball pitchers are lucky - unlike bowlers in cricket they don't get their stats trashed by poor fielding.

Hopefully one of your American subscribers will write in with more authoritative de-



finitions. It's been several years since I played Hardball and so I have not looked at the stats but most American stats are usually represented in quasi-percentage format e.g. a batting average of .245 would indicate that the batter had managed to hit 24.5% of all balls pitched to him.

I hope this is of some use.'

Many thanks for the letter, it is always great to have some correspondence from a long time reader who has never written before. This just proves that almost everyone has a little bit of knowledge or experience that could be be shared with other Atari users and that is just what Mailbag and the Tipster are here for.

DESKJET HELP

Finally we have a letter from Joseph Friggieri who lives in Malta and would like some help in using an HP Deskjet with his Classic: 'I have an Atari 130XE, XF551 disk drive and the Hewlett Packard 500C Deskjet printer.

I use my equipment for word processing using Mini Office II and the Swift spreadsheet in which both programs allow to set up printer codes for printing bold, italics and underlining and a choice of three types of fonts built in. I am writing to seek your help if there is any program or any other way to be able to print "LARGE TEXT" on the HP550C printer.'

I think what Joseph is looking for is to be able to use the graphics element of the printer to print 'banner' type headlines. There are several PD Epson based utilities and presumably these could be altered to use the Deskjet graphic commands. I can't help but I am sure that someone either uses a Deskjet or could help Joseph with writing a program if he supplies the Deskjet commands from the manual. If you can help get in touch direct to Joseph Friggieri, The Cousins, Sigismondo Dimech Street, Balzan BZN 08, MALTA.

Your views, questions and general comments are always welcome - nay, demanded! - so be sure to write a letter to Mailbag in time for the next issue. Here's the address:

MAILBAG
NEW ATARI USER
P.O.BOX 54
STAFFORD
ST16 1TB

INTERNET RAMBLING

SEEKING AUTHORS and Finding the Truth

In recent months much has been said about the Internet in the pages of New Atari User, in the mainstream media and on the television. Those inexperienced on the Internet may be wondering what all the fuss is about. This article should hopefully give you some ideas about what is out there, what is being said and how it relates to the Atari.

It's my guess that most Atari users in the UK who have access to the Internet do so either from work or from college/University. Indeed that is where I gained my experiences. A couple of months ago I changed jobs and lost my access and I can tell you it has been sorely missed. Just before that happened I came across a very interesting article in the comp.sys.atari.8-bit newsgroup about the game Jawbreaker. I have sought the poster's permission to submit their articles for publication and they have willingly agreed, so here goes.

Compiled by Richard Gore

ASK AND THE AUTHOR RESPONDS

Whilst scanning his collection of disks one Atari user came across several copies of the classic arcade game Jawbreaker and here is what he said:

"On one disk there are several copies of John Harris' game Jawbreaker with two wrap tunnels, one horizontal, and one vertical. On another disk is another copy of Jawbreaker with a different maze layout and only one wrap tunnel, at the top and bottom. Anybody know what the story is here? Why two different versions, and which one is the 'real' Jawbreaker?"

The good thing about the Internet is that you can often get straight to the people who know the answers, even though you have no idea that they might be reading. John Harris who wrote Jawbreaker (he also did Mousekattack and Frogger) replied:

"There are actually three versions of Jawbreaker that got shipped by On-Line Systems, but one of those was an accident.

The first version was the one with the single wrap tunnel, which was a copy of the original

PacMan maze. On-Line got sued by Atari for copyright infringement, and one of the defence strategies was to show that there was a game prior to PacMan that had a similar game play of 'eat the dots in a maze while avoiding computer controlled bad guys'. If you remember a game called 'Head-On', which had a car driving around concentric rectangular tracks with places to change 'lanes', it does fit that description. I had actually programmed a version of Head-On a while before I did Jawbreaker, and what we decided to do was to create a special Jawbreaker version that looked somewhat like the rectangular Head-On layout in an effort to show a product that theoretically looked like it could be in-between Head-On and PacMan, as opposed to post PacMan. Someone at On-Line liked the dual wrap tunnels and decided to ship this game even though it was only meant as a court prop. This version did not play very well, because the happy faces tended to get stuck in one lane and would just keep going round and round. On-Line got complaints about it, but also got publicity about a new version that had dual wrap tunnels, and so I decided to make a 'real' new version with an original maze layout and two tunnels. The result was the final version of the product that was shipped.

So in summary, there are three versions, and although they are all technically 'real', only versions 1 and 3 were supposed to be shipped. Version 1 - Original PacMan maze with one wrap tunnel. Version 2 - Very rectangular looking maze and two wrap tunnels. This version won't have any passageways that twist and turn in different directions. Version 3 - Two wrap tunnels, with an original maze layout more in the style of the original version."

So that's the truth about Jawbreaker, interesting don't you think?

MORE AUTHORS ON-LINE

Recently the Internet has seen the resurgence of several Atari game authors. John Harris has been active for some time now, but others to appear have been Ivan Mackintosh (who wrote Black Lamp, Tube Baddies, Cavernia, Crumbles Crisis and more many with the graphical and sonic wizardry of Richard Munns) and more recently Adam Billyard (of Electraglide fame). Other topics of conversation pop up - piracy is always worth a 'thread' and more recently discussion about the Atari emulator for PCs has become common place. Most newsgroups also maintain a FAQ (an acronym for Frequently Asked Questions), the Atari 8-bit one is a mine of information about all aspects of the 8-bit Atari from every model released (and not released) to pinouts of the I/O ports to a discussion of which DOS system you should be using. There is no doubt that if you can get the Internet for free (school/work) then use it, otherwise you have to consider if the £150 (approximate subscription costs) plus telephone calls are going to be worthwhile.

continued ☛

INTERNET Ramblings continued

SOME MORE TITBITS

Just a few more facts for you to feast on. There is a version of Head-On available for the Atari, it is called Dodge Racer and was the first Atari game ever released by Synapse Software. It plays best in two player mode, but the sounds and graphics are very simple, well it was released in 1981 and parts of it are written in BASIC! You may also have heard of Jawbreaker 2 which was also released by On-Line but was not programmed by John Harris but by a chap calling himself Chuckles who also made a brief appearance on csa8. (csa8 is short for comp.sys.atari.8-bit, most newsgroups shorten their names for easy reference in text). There was apparently some confusion between him in On-Line when they were describing the gameplay they wanted and as a result (in my opinion) the original is the better game.

STILL AVAILABLE

Now for the plug. For those who don't know I have done a deal with John Harris whereby Jawbreaker and Mousekattack can be sold again. I can supply the Jawbreaker package on disk for £2.99 inclusive of p&p, and for that you get both versions 1 and 3 (as described above) included on one disk as well as a special bonus surprise just waiting for you to discover! I also sell Black Lamp, Tube Baddies, Arena, Bubble Zone and the GTracker suite of programs for playing and manipulating digitized sounds. For further information I can be contacted at:

RICHARD GORE, 79 SPROTBROUGH ROAD, SPROTBROUGH, DONCASTER, DN5 8BW, ENGLAND. Tel. (01302) 784642.
Sorry no new e-mail address yet!

DISK BONUS

TAG!

by Richard Gore

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Tag is a game inspired by the children's game of a similar name; Tag, Tag you're it! Come on, we've all run around the school playground as little children playing that game!

In this computerised version funny faces pulsate their way around the screen trying to pass on the dreaded lurgi. Of course as with all playgrounds there are obstacles in the way, walls mainly, but I bet in the playground you couldn't pick up icons that made you invincible, made you go faster or slower or froze you, or even infected you with the lurgi! Well you can now!!!!

Tag! allows up to four players on screen at once, three can be human controlled and the fourth is computer controlled. Go on, relive your childhood!

LOADING TAG!

Boot the game disk from drive 1 without BASIC, i.e. hold down OPTION when booting. Tag! requires a 64k (or more) Atari XL/XE 8-bit computer in order to run properly. To obtain the stereo sound effects your computer needs to be fitted with a Gumby compatible stereo upgrade but the sound will still be okay otherwise, it will just be mono. the Title Screen - From the title screen you may select which playground area (also called a maze) you want to play in. Four different mazes are available, selected by pressing keys A, B, C or D.

To choose the number of human players press the SELECT key to toggle between 1, 2 or 3 human players. At the start of each game the computer also controls a player, so if one human player is selected the game will proceed with one human and one computer player, if two human players are selected the game will start with one computer and two human controlled players etc. To begin a game press the START key.

PLAYING TAG!

the object of playing Tag! is to avoid being infected by the lurgi. Each player controls a funny face on screen. At the start of each game one player is randomly infected with the lurgi and he must pass this on to another player before the time runs out. To pass on the lurgi you simply have to touch one of your opponents, but be careful - if you don't get away quickly enough he may tag you back.

After a random length of time, the last six seconds of which will be counted using the on-screen clock (located towards the bottom, centre of the screen) the player infected with the lurgi will die. If more than one player remains, the next round will begin, whereby the procedure will be repeated but without the player that has just died.

You can tell which players are dead, living or 'it' (the infected one) by observing the status display at the bottom of the screen. Also the infected player will be white in colour.

Whilst playing Tag! you can pick up various icons that may help or hinder you. To do this simply move over them. The icons are speed up, slow down, freeze, infect, immortal and random. When you are immortal you turn a pale grey colour and you cannot be infected with the lurgi. Be careful though, the icon effects only last for a short period of time, except for infect which lasts until you pass the lurgi on in the usual way, or somebody else collects an infect icon.

THE CONTROLS

Human Player 1 is normally green in colour and is controlled by a joystick in port 1 of your Atari. Human Player 2 (if selected) is normally blue in colour and is controlled by a joystick in port 2 of your Atari. Human Player 3 (if selected) is normally yellow in colour and is controlled from your keyboard. Keys A & Z move your player up and down, while keys N & M move your player left and right.

Player 4 is normally pink in colour and is always controlled by the computer. Some of its movement is random, but the majority is calculated to chase or avoid other players when necessary.

During the game you may press the SELECT key to toggle on and off the background noise (but not the normal sound effects which will remain active). You may also press the OPTION key to pause the game play. Press OPTION again to continue.

At the end of each round you should press the START key to proceed to the next round, as indicated on screen. At the Game Over prompt, press START, SELECT or OPTION to return to the title screen.

ADDITIONAL NOTES

Tag! was programmed using the Quick! programming language available from DGS in the UK. The source code is included on the disk (under the filename TAG2.QIK) for you to examine and alter etc. for learning and review purposes only.

The movement logic of the computer controlled player is not completely infallible, in certain circumstances the computer controlled face can get stuck. The random function helps to eliminate this but does not do so entirely. There are only a couple of hundred free bytes left but a future revision may include more complicated computer logic. As it stands, though, it still offers a pretty mean game. It's even more fun with two or three human opponents.

THE NOSTALGIA column

by Dean Garraghty

THE ATARI USER SHOWS

In this issue I'm going to get nostalgic about another great part of the Atari's history - The Atari User Shows.

These shows ran from early 1986 to early 1989, with two shows a year, one in the Spring and the other in late Autumn. They were all held in London, although they did move about a bit during their time! The first one was held at the Hammersmith Novotel Hotel. It then moved to the Horticultural Halls, then back to the Novotel and finally settled down at Alexandra Palace. The shows were always over a few days finishing on a Sunday. Although you were supposed to get a show guide when you went in, I rarely got one and those I did get are now sadly lost. Therefore, I am going to do this article entirely from memory! No easy task when some of these shows were almost 10 years ago!! I can't remember everything about every show in detail so I will talk about things I can remember. I can sometimes remember which show things happened at, but sometimes I can't so I'll just throw in memories as they come to me.

BIG SHOWS ... BIG COSTS!

These shows were full of 80's glitz and over-indulgence, and no excuses were made for this! The stands were big and expensively furnished. The people behind the stands were over-keen. Everybody was trying to out do everyone else! But all this just made it more fun for the visitors! Sandy at Page 6 has told me that these shows were stunningly expensive to exhibit at. The stands cost in the small thousands of pounds! You also only got the space, the stand itself was your problem! Also, the organisers had some deal going with a local TV hire company so if you wanted to use a TV at the show (and let's face it, everybody would need a TV!), you HAD to hire it from the organisers at some total rip-off price. You could not bring your own! The organisers must have made a fortune out of these shows!

YOUNG VISITORS

I was a mere lad when I attended that first show in 1986. I went down on the train on the Sunday with very little money in my pocket but plenty of excitement! I had never been to a computer show before and I had no idea what to expect. I can clearly remember that first journey down. Getting across London on the tube was the biggest task! I've never really liked the tube (I still try to avoid it even now when I need to be in London!), but I had to use it to get to the show so I didn't mind too much on this occasion. While walking to the show from the station, I met up with an American guy who was on his way there too. He was wanting to buy whatever he could for his new ST. He wasn't too impressed that I had a lowly 8-bit machine, so he'd probably laugh his socks off if I met up with him again now!!

I can still remember arriving at the show. You had to go under some sort of covered car park to get to the entrance. Inside there were a few stands outside the main part. You then went through some mirrored doors and then Atari stands as far as the eye could see! Wow!

First call was to the Atari User stand. I needed some back issues to complete my collection. They had some sort of deal running which allowed you to get 6 for the price of 5 or something. I only needed 5 so I stood and moaned a bit, and the guy gave me a quid back!! Yes, I was even cutting deals as a kid! I also bought Miner 2049er on cartridge from Silica. They had it on special offer for about a fiver which was cheap back then!

SO MANY STANDS

I spent hours going around all those stands. Rows and rows of them! I picked up loads of free catalogues and other bits and pieces people had stuck in my hands on the way round. I probably went home with more freebies than stuff I had actually bought! I also remember paying 50p for a can of warm coke. And don't forget that this was 1986, so just work out how expensive that can of coke would be today at those prices!

By the next show later that year, I had loads of money to spend and it was at this show that I bought my first 1050 disk drive. I can still remember it all perfectly! I first went to a supplier who was cheaper than Silica but they didn't have any. They said they would send me one by courier and throw in some free software as well, but I had waited long enough and I couldn't bear waiting a few more days! Off to Silica I went and handed over £130. They also threw in a copy of Miner 2049er which I didn't want or need because I'd actually bought this at the last show! Apparently, though I didn't know it at the time, I had snapped up the last 1050 to be had anywhere at that show! Some guy actually offered me £200 for it a bit later on, but I refused! I must have been mad!! Next job was to get some blank disks. I actually found a company selling Maxell branded disks at a mere £2.50 per box. That was a staggering bargain in 1986, and even now some office supply companies are charging more than double that for a box of 5¼" DD disks! I still have all 20 Maxell disks I bought at that show and they all still work perfectly!

I then attempted to find some software to transfer all my tapes to disk. Off to Page 6 I went, but the sales person didn't seem to have a clue what I was talking about *(couldn't have been me! Ed.)* and just slung a catalogue at me and suggested I look myself *(I have an idea who it might have been now! Ed.)*. After some searching I found some bit of PD which sounded about right. It worked, but not that well!

Visitors to this show may well remember a large guy shouting the odds about having software at bargain prices. He had a big mound of software behind him which all looked a bit battered. I asked him about my

transfer to disk problem and he obviously didn't have a clue about anything! He just shoved a bit of paper in my hand and said ring this number and ask. Box shifting at its very worst! I ended up buying PILOT on cartridge from these people. The box had scribble on it, and it looked like it had been run over by a steam roller!

I can remember getting home from that show as though it were yesterday! I dashed straight in to try my new drive. For some reason, the first thing I tried was to copy some Basic programs from tape to disk. Being a tape only user for a year, I had no idea about DOS and such things. I remember a sinking feeling as I attempted to save a program to disk only to be greeted with an error. I knew that disks had to be formatted first, and I had already done this with DOS. What I didn't know, was that the driver for disk access had to be loaded from disk (in other words I didn't realise that you had to boot the DOS disk before you could do anything with the disk drive from Basic!). After some time I realised that you had to boot the DOS disk before you could do what I wanted to do. What a delight when I finally got it to work hours later!

STRANGE CHARACTERS

I remember at one show passing the Llamasoft stand. What a bunch of weirdos these lot were! The stand was in total darkness, except for a few coloured flashing lights. Some very strange music was playing, and about five hippies were sat on the floor with their eyes closed just sort of nodding to the music. How on earth this would help sell their stuff is beyond me!

I can remember that at one show there was a power cut while I was wandering about near the Page 6 stand. It only lasted a couple of minutes, but obviously when the power came back on all the machines started re-booting. A guy was talking to a load of people and said *"Ah, yes that's called re-booting"*, and everybody looked really impressed and stunned at his apparent technical knowledge! Heck, some people were naive back in the old days!!

THE SHOW ON THE HILL

When the show moved it meant a train journey from Kings Cross station to Alexandra Palace. The train was usually full of people going to the show. Everybody seemed to bring their copy of Atari User along with them and would flick through and discuss what they were going to buy at the show. This all added to the build up and made me want to get there even faster!

For people who have never been, Alexandra Palace is on top of a whacking great big hill! There should have been a free bus service to collect you at the station and take you up the hill, but I never saw one! Every time I went I had to walk up the hill, and it was a heck of a walk! I could almost guarantee that half way up the hill the mystery free bus would fly past me!

I remember arriving at one show at Alexandra Palace one nice sunny April day, only to be met by a queue like you've never seen! It must have been half a mile long! We walked past all these people thinking that they must queuing be for something else. There was

some sort of craft fair or something going on in one of the other halls. We got to the front only to be met by a security guard. We told him we were for the computer show, and he said *"The hall's full, you'll have to queue"*. He pointed in the direction of the queue, and I thought I'd never get in. As luck would have it, a guy came out with a megaphone and said that anybody with advance tickets to the show (which I always bought), could go in. We were wandering about near the entrance and as soon as he said that we legged it in!! Yes, we jumped the queue big time!

THE LAST SHOUT

At the very last show in 1989, there were very few 8-bit suppliers there. It had gone virtually all ST by that stage. There were some bargains to be had though. There was a stand selling off 8-bit tapes and cartridges. Some kid in front of me got a whacking great pile of brand new tapes for a fiver! Even today I would snap that deal up! He must have got at least 30 tapes. I hung around for some deals. The guy behind the stand was a bit sure of himself, and kept having what he described as "a mad moment" during which he would sell stuff off at a stupidly low price. Luckily for me he had one of these moments soon after and plonked a load of cartridges on the stand and said *"10 quid the lot. You've got 10 seconds to say yes starting now!"*. I stood there looking cool even though I knew I was getting an amazing deal. I said *"Throw in some of these disks and I'll think about it!"*, pointing at some disk-based stuff. He said *"I'm throwing in nothing!"*. I said *"OK, don't want them then!"*. I was just about to walk off when he agreed to throw in some more stuff! I ended up with so much stuff for my 10 quid that I had difficulty carrying them! I got about £100 worth of stuff for a tenner! Was I happy!

END OF AN ERA

After that last show in April 1989, the Atari User show became part of history. The idea was that it would merge together with other shows that Database Exhibitions organised including one for the old BBC Micro. The new show was to be called the Computer Shopper show which is, of course, still going and is now probably one of the biggest shows there is. I have never gone to a Computer Shopper show. For me the magic had gone never to be seen again. Computer shows today are usually one of two types: massive shows like the Shopper show, and tiny "car boot under a roof" type of events like AMS. For the 90's these new bargain basement, get it out cheap shows had taken a stronghold. The glitz and glamour of the 80's computer shows had pretty much gone.

Later that year, in November 1989, what was left of the Atari 8-bit industry moved itself to the AMS show. But that's another article for next time!



PROGRAMMING

WAIT

FOR ATARI AND TURBO BASIC

by John Foskett

When a program written in Atari BASIC is used in Turbo BASIC, everything is speeded up, including sound effects, joystick routines, etc. which could for example make a game program unplayable. The machine code routine presented here runs at the same speed in both Atari BASIC and Turbo BASIC and could be used to stabilise the speed of sections of a program to allow them to run at a constant speed no matter which language is being used. This allows a program to enjoy the faster speed of Turbo BASIC whilst certain areas of the program remain user friendly. The routine could be called from within FOR-NEXT loops to regulate the speed, and although there would be a small increase in speed due to Turbos faster actioning of the commands, the actual increase in speed iof the routine will only be of about a few percent.

USING THE ROUTINE

The routine may be used with or without a timing parameter as follows....

X=USR(ADR(WAIT$),NUM)

where NUM is the timing parameter in the range of 0 to 255 (inclusive). 255 (and 0) gives the longest time period of approximately 4 seconds and a value of 1 gives the shortest time period of about 0.04 seconds.

For the minimum time period, the routine may be used without a parameter (equivalent of the above using a parameter of 1) i.e.

X=USR(ADR(WAIT$))

HOW THE ROUTINE WORKS

The routine is basically three loops working inside each other using all three of the processor's registers and without using any external memory locations.

The first action of the routine is to load the X register with a 1 (for the default) and the Y register with zero prior to removing the first parameter from the stack. The first parameter will either be a 1 or 0 depending upon how the routine is used, that is with or without a parameter. If the routine is used without a parameter (default), then the next stage to remove the parameter is bypassed, but if there was a parameter then it is removed from the stack and transferred to the X register overriding the default value previously put there. The X register is decremented to zero within its loop (the outer loop) so that the overall time period of the routine is dependent upon the value the X register contains. The Y register always increments from zero through 255 and back to zero within its loop (the middle loop) whilst the accumulator's loop (the inner loop) increments from 0 to 10. Incrementing the accumulators loop to 10 before resetting it gives a maximum time period of about 4 seconds when using a timing parameter of 255 (or 0).

ALTERING THE TIME SCALES

The main timing parameter which governs the overall time scale of the routine can be found in the source code listing defined by the label TIME which is set to 10. This is used to compare with the processors accumulator (CMP) and hence used to exit the loop. Any value may be used here from 0 to 255 (inclusive) where 1 will give the minimum time and 255 (and zero) will give the maximum. The character concerned is the 15th character which may be altered in the string directly as follows....

WAIT$(15,15)=CHR$(VAL)

If required, WAIT$ may be altered permanently by inserting the relevant character directly into the string. The following table gives approximate minimum and maximum time scales in seconds for different values of VAL where X is the timing parameter used in the USR call.

VAL	MINIMUM X=1	MAXIMUM X=0/255
1	0.04	0.8
5	0.04	1.9
10	0.04	3.8
20	0.06	7.8
50	0.10	19.4
100	0.18	39.0
150	0.26	58.0
200	0.34	78.0
255	0.42	99.0

DEMONSTRATION PROGRAM

The actual machine code routine is the string immediately below the REM header and the rest of the listing is the demonstration program.

The demonstration program prompts for a value from 0 to 255 (inclusive) to be entered and then this value is used in the USR call after which the resulting delay is timed. A value of 1 gives the shortest time delay whilst values of 255 and zero gives the longest delays.

Programs overleaf ☞

```
HY 10 REM ********************************
HU 20 REM *          W A I T             *
IM 30 REM *   A MACHINE CODE ROUTINE     *
LJ 40 REM *          VERSION II          *
CU 50 REM * WITH DEMONSTRATION PROGRAM *
CV 60 REM *------------------------------*
DK 70 REM *  BY JOHN FOSKETT   JAN'97   *
YS 80 REM *     FOR NEW ATARI USER       *
IG 90 REM ********************************
RT 100 DIM WAIT$(26)
IA 110 WAIT$=""[A]_[,]hp[D]hh*(X)i[A]
   I[J]<P>z)[,]HPuJPr[.]"
QQ 120 REM
QS 130 REM
LB 140 REM ----------------------------
FW 150 REM  DEMONSTRATION PROGRAM
FJ 160 GRAPHICS 0:POKE 16,64:POKE 53774,6
   4:TRAP 260:DIM L$(40):L$="_":L$(40)="_
   ":L$(2)=L$
DX 170 POSITION 0,0:? "                W
A I T               ":? "   A DELAY
    MACHINE CODE ROUTINE"
AW 180 ? :? "  WRITTEN BY JOHN FOSKETT
   JAN'97":POSITION 0,5:? L$
SL 190 ? "THIS ROUTINE RUNS AT THE SAME S
   PEED   IN BOTH ATARI AND TURBO BASIC."
YA 200 ? :? :? "THE ROUTINE IS CALLED AS
   FOLLOWS....":? :? "      X=USR(ADR(WA
   IT$),NUM)"
XT 210 ? :? :? "PLEASE ENTER 'NUM' (0 to
   255) ";:INPUT NUM:IF NUM<0 OR NUM>255
   THEN RUN
XZ 220 POKE 752,1:? :POKE 19,0:POKE 20,0:
   X=USR(ADR(WAIT$),NUM)
SE 230 ? :? "THE DELAY WAS ";(PEEK(19)*25
   6+PEEK(20))/50;" SECONDS[ESC,BELL]"
GL 240 POSITION 0,22:? L$;"PRESS START
   TO RUN AGAIN";
XT 250 IF PEEK(53279)<>6 THEN 250
UY 260 RUN
```

Underline = INVERSE CHARACTERS · [ ] = CONTROL + CHARACTER · < > = INVERSE CONTROL + CHARACTER

TYPING THE MACHINE CODE STRING

Because of the difficulty involved with typing machine code strings, the second program has been included to write the string for you from a bank of numeric data. Simply run the program and press START after which the string will be written to disk using the file name "STRING.LST" in the LIST format. It is then a simple matter to ENTER the string from disk. ●

```
UA 10 REM ****************************
CR 20 REM *        W A I T           *
AI 30 REM *   MACHINE CODE ROUTINE   *
UQ 40 REM * CHARACTER STRING WRITER  *
NK 50 REM * BY JOHN FOSKETT   JAN'97 *
UF 60 REM ****************************
FI 70 GRAPHICS 0:POKE 16,64:POKE 53774,64
   :DIM F$(14):F$="D:STRING.LST"
KF 80 POKE 752,1:? :? "CHARACTER STRING W
   RITER":? :? "PRESS START TO BEGIN"
PT 90 ON PEEK(53279)<>6 GOTO 90:? :? "WRI
   TING TO DISK - PLEASE WAIT":RESTORE :O
   PEN #1,8,0,F$
WM 100 REM  Write MC String
TY 110 ? #1;"110WAIT$=";CHR$(34);
AM 120 READ J:IF J<0 THEN 150
XY 130 ? #1;CHR$(J);:GOTO 120
BS 140 REM  End
GZ 150 ? #1;CHR$(34):CLOSE #1:? :? "FILE
   WRITTEN IN THE LIST FORMAT":? :? "FILE
    NAME: ";F$(3);"[ESC,BELL]":END
EE 160 REM  Machine Code String Data
FX 9999 DATA 162,1,160,0,104,240,4,104,10
   4,170,152,105,1,201,10,144,250,169,0,2
   00,208,245,202,208,242,96,-1
```

Underline = INVERSE CHARACTERS · [ ] = CONTROL + CHARACTER · < > = INVERSE CONTROL + CHARACTER

GTIA SOUND for Stereo 8-bits

This article seems to be interesting to those who like tinkering about with their computer but the modifications have not been tested by Page 6. It was submitted by 'Ye Olde Atari 8-bit Owner' either because he is too modest to admit to his expertise or because he doesn't want to take the blame if you ruin your Atari! As always, only tinker with your Atari if you are confident that you know what you are doing (or you have a spare machine picked up from a car-boot sale!) - we don't take any responsibility for any mishaps.

When using POKEY stereo on your 8-bit, you will notice that certain sounds are missing, such as the key press beeps. Some might not count this and other console generated sounds as much of a loss. For those of us who do, the solution is as simple as soldering in a single wire with a diode on the end with, if you wish, the added inclusion of a selector switch. This article will show you how.

STEREO UPGRADES AVAILABLE

First let's go over the various stereo units we have for the Atari Classic. We have:

1) Chuck's original Gumby stereo mod
2) Gralin's Stereo Plus
3) Micro Discounts' stereo upgrade kit

If you have Chuck Steinman's' Gumby mod you might have the mono/stereo selector switch fitted, if you do then your previous efforts, have saved you some work this time.

If you have Gralin Internationals' Stereo Plus fitted then you will also be fitting a mono/stereo selector switch.

Finally if you have Micro Discounts' stereo kit fitted, you will have little to do.

FITTING A SELECTOR SWITCH

Let's go over the switch unit first, you can obviously skip this bit if you already have one fitted. The only reason for adding a selector switch is so that you can have your GTIA generated console sounds in mono or stereo as desired along with your POKEY1/2 generated sounds.

For this modification you will need a Philips type screw driver, soldering iron, solder, a drill and drill bit and a small adjustable spanner. The components needed are :

1 x 3 pin, 2 position toggle switch
2 x lengths of wire (for soldering)

Open up your 8-bit, and remove all parts to give access to the phono sockets (i.e. undo the

screws, remove top half of the case, remove keyboard, and shielding if necessary - just as you did when you fitted the POKEY2 mod).

Position the pins of the toggle switch towards you. Let's number them 1, 2, and 3 (from left to right) for clarity - it would be an idea to mark them for reference. Also have the two audio wires going to the two phono output sockets labelled (L & R) to indicate their function, so:

(L)eft is POKEY1 (the signal picked up from the main board)

(R)ight is POKEY2 (the signal picked up from the added POKEY2 mod)

When you are ready, proceed with the following steps.

1) Only one wire is desoldered from the phono plugs and it is the audio wire for the right hand sound channel signal. *DO NOT DESOLDER THE SHIELDING/GROUND WIRE WITH IT.*

2) Now solder the wire for the right hand sound channel(just desoldered in step 1) to pin 1 of the toggle switch. Note: The position you will be mounting your switch is up to you but allow for the reach of your wires from the phono sockets to the switch position.

3) Cut a suitable length of wire to be soldered to pin 2 of the toggle switch at one end and soldered to the position on the phono socket where you removed the wire providing the right hand sound channel signal in step 1.

4) Now cut a suitable length of wire to be soldered to the remaining pin on the toggle switch (pin 3) at one end and then to the same position of the wire connected to the phono socket providing the left hand sound channel signal.

5) Drill a hole of the respective size to allow the switch mounting to be facilitated at whatever position you wish.

After soldering, check that the switch functions correctly before fitting it to the case. If the switch functions incorrectly re-read instructions and check for errors.

ADDING GTIA SOUND

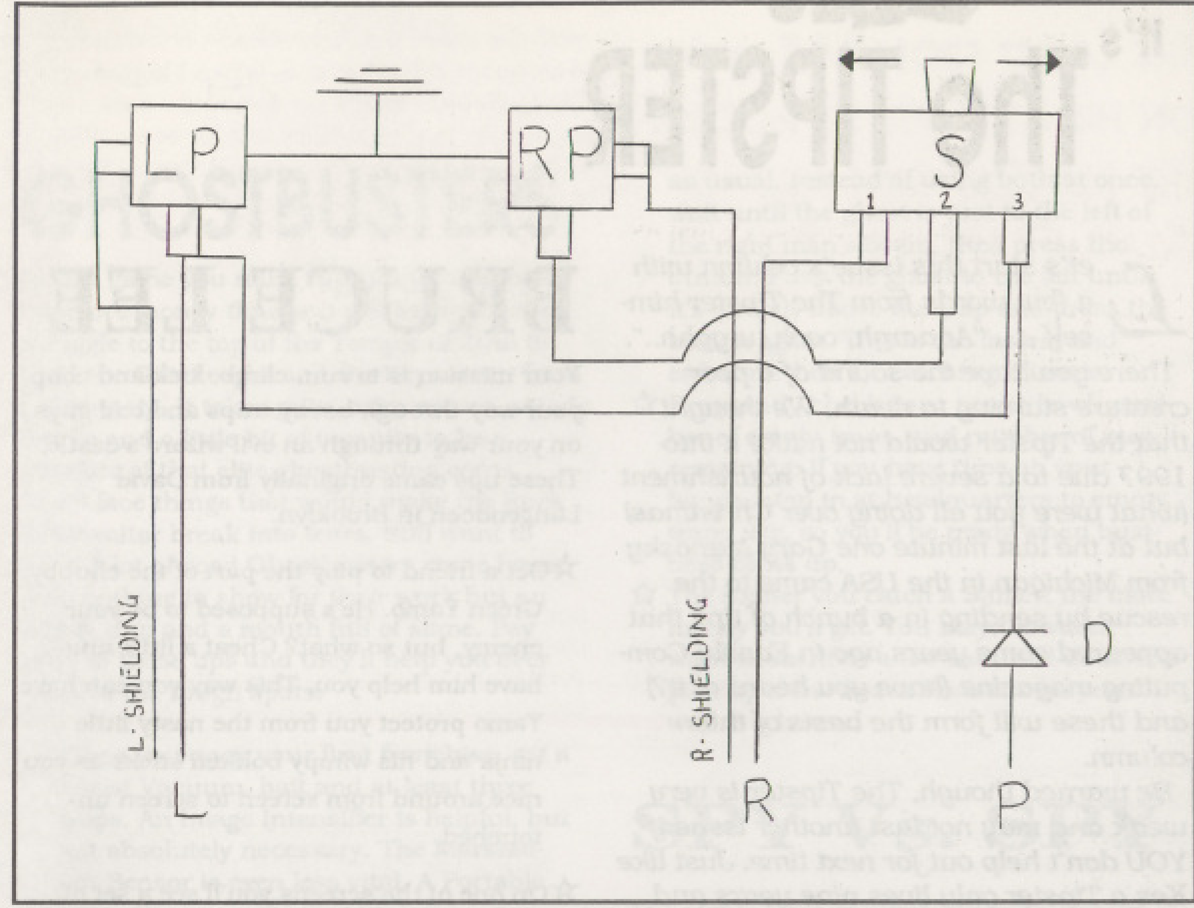
The tools you will need for this are a Philips type screw driver, soldering iron and solder. Components are simple a length of wire and a diode (for 5v).

Open up your 8-bit, removing the top half of the casing and shielding (unless, of course, it is still open from the selector switch mod.).

1) First locate your GTIA chip. This chip is part No. C014805 and the circuit board designation is U17. XL owners should direct their attention to the four large chips laid out horizontally along the bottom - looking from left to right the first one is the GTIA chip. XE owners should direct their attention to the centre of their 8-bit's circuit board, where you have a horizontal stack of chips in a vertical column, the lowest of the three large chips is your GTIA.

2) Having found your GTIA chip you must find the pin that generates the console sounds. Pin 15 of the GTIA chip is labelled as S3 and is responsible for the keyboard click. To find this pin count 15 pin positions left to right along the top pin row of the GTIA chip. XL owners can simply follow the trace from the pin to the bottom of component C17 (a capacitor) for their pick up point. XE owners can follow the short trace leading out until it reaches a short distance and stops at a hole for their pick up point.

3) Prepare your wire to the right length to go



LP	Left Phono output, POKEY 1	P	Pick up point for GTIA generated console sounds
RP	Right Phono output, POKEY2	L	Left sound channel from main circuit board, POKEY1
S	Switch unit for mono/stereo selection	R	Right sound channel from upgrade mod, POKEY2
D	Diode		

from your pick up point to the pin on the toggle switch with the wire that goes to the left hand sound channel output phono connector (pin 3).

4) After preparing the wire solder the diode to it on either end (by the pick up point or the toggle switch pin) *BUT POSITION THE DIODE SO VOLTAGE FLOW IS FROM THE PICK UP POINT TO THE SWITCH PIN.*

After soldering check for console generated sounds through the stereo phono jacks. If the sound is trashy (like an out of tune radio station), then you soldered the diode the wrong way so resolder it in the other direction.

Upon successful completion, reassemble your 8-bit but if you find any problems replace your 8-bit to it's original setup prior to your failed attempt.

CHECK AS YOU READ

If you have your 8-bit open while reading the above text you will find that it helps to give this text more substance, and it doesn't sound so hollow. ●

HEY! HEY! it's The TIPSTER

Let's start this issue's column with a few words from The Tipster himself ..... "Aaaargh, oooh, urgghh..". There you have the sound of a poor creature starving to death. We thought that the Tipster would not make it into 1997 due to a severe lack of nourishment (what were you all doing over Christmas) but at the last minute one Gary Manosky from Michigan in the USA came to the rescue by sending in a bunch of tips that appeared some years ago in Family Computing magazine (have you heard of it?) and these will form the basis of this column.

Be warned though, The Tipster is very weak and may not last another issue if YOU don't help out for next time. Just like Kes a Tipster only lives nine years and as he was born in June 1989 he still has over a year left to live - unless you kill him off before his allotted span. Just think how bad that will make you feel. Do something about it, you know what you have to do.

* * * * * * * * * * * * *

First off here's a couple of tips from Gary Manosky himself.

CAVERNS OF MARS:

Press Tab+CONTROL+SHIFT to skip levels.

PHOBOS: Same again.

THRESHOLD: Remove the disk after the main load. Each time the drive starts/restarts you will advance one level. Replace the disk when you are ready to play.-

BRUCE LEE

Your mission is to run, climb, kick and chop your way through booby traps and bad guys on your way through an evil wizard's castle. These tips came originally from David Langendoen in Brooklyn.

☆ Get a friend to play the part of the chubby Green Yamo. He's supposed to be your enemy, but so what? Cheat a little and have him help you. This way you can have Yamo protect you from the nasty little ninja and his wimpy bokken sticks as you race around from screen to screen untouched.

☆ On one of the screens you'll see a set of orange symbols. Don't ignore them! When you touch them, they give you an extra life. You can get up to five extra lives this way.

☆ Lure your enemies into following you over the fiery bushes. Just after you pass over one it bursts into flames, killing anyone above it instantly. You can also kick the Yamo or ninja into the flames.

☆ On the very first screen, climb up the vines and wait until the ninja is beneath you. Then jump down on his head. Keep doing this and you'll soon notice something very interesting. This secret trick works on all other levels where you can jump on the ninja's head.

GHOSTBUSTERS

In this game you must capture ghosts, earning more money than you started with, and struggle to the top of the Temple of Zuul to keep the Gatekeeper and the Keymaster from teaming up. It takes guts, calm nerves, steady hands and a little bit of insanity to be a member of that elite ghostbusting corps. You'll face things that would make the Rock of Gibraltar break into tears. Still want to join? A lot of good Ghostbusters come home with nothing to show for their work but an empty trap and a mouth full of slime. Pay heed to these tips and they'll help you over some of the rough spots.

☆ When you open your first franchise, get a Ghost Vacuum, bait and at least three traps. An Image Intensifier is helpful, but not absolutely necessary. The Marshallow Sensor is even less vital. A Portable Laser Confinement System is an expensive investment if you have money to burn.

☆ The best car to get, regardless of how much money you have, is the station wagon. The high-performance car is fast but not worth $15,000

☆ Remember, it's great to have lots of equipment, but you have to replace all the money you spend by the end of the game.

☆ If your PK Energy Detector warns of an approaching Slimer, bide your time by cruising and freezing some Roamers. After the detector signals, there's lag time before the Slimer actually arrives.

☆ Team up with a friend. That way one of you can keep a hand on the bait button and watch out for the Marshmallow Man. You might want to take turns with the joystick.

☆ If you're in a hurry, here's a quick way to catch a Slimer. Set up your Ghostbusters as usual. Instead of using both at once, wait until the ghost is just to the left of the right man's beam, then press the button. Push the ghost to the left until it's directly above the trap and press the button again. This is the fastest and safest method for catching Slimers.

☆ Frequently check your power level, number of empty traps, and number of men remaining. If you have time on your hands, stop in at headquarters to empty traps, etc. so you'll be ready when business picks up.

☆ The sooner you catch a Slimer, the more money you'll get. You may, however, want to sacrifice a few hundred dollars to pick up a few frozen Roamers on your way to a house.

SPY Vs. SPY

The aim is to be the first spy to gather the necessary money and loot, stash it in your case and leave the embassy in an awaiting aeroplane.

✾ There are two ways to attack the enemy spy. Hit him in the stomach or bash him over the head. As a rule go for the head when you're at a distance, and for the stomach when you're closer.

✾ Use the split screen wisely, making note of where your opponent stashes traps and items you may need.

✾ Sometimes the room where you begin at the game's start or just after you have died has only one door. If you think your opponent will die next (and have to start all over again in that room) water-trap the door. That's a way to really aggravate your enemy.

There's more ☞

INTERNET UPDATE

THE LATEST FROM M TOMLIN ON HIS ATTEMPTS TO ACCESS THE INTERNET WITH HIS ATARI CLASSIC

You will recall last issue that I wrote about using my 8-bit Atari to access the Internet and you may be wondering how I got on. Well, the frustration of not being able to easily read the on-screen text which the host computer was sending has forced me to give up for now. It was very hard indeed to read text sent in 80 column format which the Atari cannot display on screen like a IBM/compatible. Even though I have a high resolution monitor - I use a Sanyo which used to belong with an old Acorn - not owning an 80 column XEP-80, which Atari used to make to alter the screen display to 80 column, meant that it was difficult to cope with the information received.

I did at least manage to send off some Email with the Atari, but I don't know if it was ever received at the other end. When I logged on to CompuServe I could see there was mail waiting for me in my mailbox but for some reason I found I could not download it, try as I may. I would love to know if John S Davison and Gordon Hooper did indeed receive the Emails I sent them, please let me know guys address below.

So for the time being I will have to wait till I can afford an IBM type PC before I try again. I fear I was asking the the poor old Atari 8-bit to do to much this time, but it did try its best. If anybody does wish to try then I suggest that you need at the very least an XEP-80 or you are wasting your time and money.

The software I used like DTERM (850 interface version) seemed to work okay but I cannot say for sure because it could have been the reason I could not download my Email. Is there anybody out there who has managed to download Email with the 8-Bit Atari from the Internet!! I would love to know how and what software (comms) they used. Anybody care to drop me a line by snail mail? My Address is

M. Tomlin, 26 Malyons, Felmores, Basildon, Essex, SS13 1PJ, ENGLAND.

- It's always a good idea to have some sort of booby-trap remedy in hand. That way if you trip off a trap, you'll have a chance of surviving.
- Before heading for the airport, make sure that you have all the required items. The guard will kill you if you're not fully equipped.
- Sneak a peek at the map when your enemy is looking at it. Remember, the embassy floor plan is the same for both of you.
- It's always a good idea to place a trap wherever you find an item. But don't forget the spots you've booby-trapped!
- Develop a code to remember where you've set traps: under all TV sets or behind all pictures, for instance. Until your enemy gets a whiff of what you're up to, it's a way to avoid getting zapped by your own traps.

That's it for another issue, the next one is up to you. How about some response to the help requested in Issue 79 (or any earlier issues that haven't been answered). For goodness sake play a game (even a PD game is fine) and send us some hints, tips, maps or scraps. A dead Tipster is not a pretty sight.

Send it to:

**THE TIPSTER
NEW ATARI USER
P.O. BOX 54
STAFFORD
ST16 1TB**



PROGRAMMING

INSTRING FOR ATARI BASIC

by John Foskett

One of the most useful commands that Turbo BASIC has which is sadly missing from Atari BASIC is INSTRING, a command which locates the position of a small string within a larger string. The routine presented here works in exactly the same way as Turbos INSTRING command returning the starting position of the smaller string or a zero if no match is found.

USING THE ROUTINE

The routine is called using the USR command as follows....

```
X=USR(ADR(IN$),ADR(MAIN$),LEN
(MAIN$),ADR(SUB$),LEN(SUB$))
```

The routine finds the starting position of the smaller SUB$ within the larger MAIN$ where the starting position is returned to BASIC via the variable "X". IN$ is of course the machine code routine itself.

To clarify the use of the routine by an example, consider the following....

```
MAIN$="I LOVE MY ATARI CLASSIC"
SUB$="ATARI"
```

In the above USR call, "X" would equal 11 because the word ATARI begins with the eleventh character in MAIN$. But if SUB$="8-BIT", then "X" would equal zero because no match is found since "8 BIT" does not appear in MAIN$.

LIMITATIONS

The only limitation with the routine is that SUB$ must be no more than 256 bytes in length, but MAIN$ can be of any length. This limitation is not a problem in practice because SUB$ would rarely consist of more than a dozen characters or so and therefore there would be no real advantage in accommodating a greater length.

```
HY 10 REM ********************************
JH 20 REM *  I  N  S  T  R  I  N  G  *
IM 30 REM *  A MACHINE CODE ROUTINE  *
QY 40 REM *  FOR USE WITH ATARI BASIC  *
CU 50 REM * WITH DEMONSTRATION PROGRAM *
LL 60 REM *         VERSION II         *
DK 70 REM *  BY JOHN FOSKETT   JAN'97  *
YS 80 REM *     FOR NEW ATARI USER     *
IG 90 REM ********************************
PN 100 DIM IN$(157)
NJ 110 IN$="hh<E>Lh<E>Kh<M>O[B]h<M>N
   [B]h<E>Nh<E>Mhh<M>P[B]-N[B]8mP[B]
   <M>Q[B]-O[B]i[,]<M>R[B]nQ[B]-
Q[B]P[C]nR[B]>[,]<M>S[B]<M>T[B]
   nS[B]-S[B]P[C]nT[B]"[,]_[,]1KQM
P[A]hHLP[B]Ps1P[B]p,fK:K"
ZR 120 IN$(101)="P[B]fLNQ[B]-Q[B]1
   [ESC,INSERT]P[C]NR[B]-Q[B]PE-R[B]P@)[,]
   <E>T<M>X[B]<E>U<M>Y[B][.]-S[B]
   <E>T<M>X[B]-T[B]<E>U<M>Y[B][.]
   "
QS 130 REM
QU 140 REM
QW 150 REM
LF 160 REM ----------------------------
GA 170 REM  DEMONSTRATION PROGRAM
BA 180 GRAPHICS 0:POKE 16,64:POKE 53774,6
   4:POKE 752,1
MR 190 DIM MAIN$(4096),SUB$(14),L$(40):MA
   IN$=".":MAIN$(4096)=".":MAIN$(2)=MAIN$
   :L$="_":L$(40)="_":L$(2)=L$
KI 200 POSITION 0,0:? "          I  N  S
T  R  I  N  G          ":? "      A MA
   CHINE CODE ROUTINE"
YL 210 ? :? "  BY JOHN FOSKETT     JANUAR
   Y 1997":POSITION 0,5:? L$;"THE ROUTINE
    IS CALLED USING...."
NJ 220 ? :? "X=USR(ADR(IN$),ADR(MAIN$),LE
   N(MAIN$),   ADR(SUB$),LEN(SUB$))"
PL 230 RESTORE 340:FOR I=1 TO 22:R=INT(RN
   D(0)*4078)+1:READ SUB$:MAIN$(R,R-1+LEN
   (SUB$))=SUB$:NEXT I
NA 240 RESTORE 340:R=INT(RND(0)*26):FOR I
   =0 TO R:READ SUB$:NEXT I
ZF 250 ? :? :? :? "SUB$=";CHR$(34);SUB$;C
   HR$(34)
DR 260 X=USR(ADR(IN$),ADR(MAIN$),LEN(MAIN
   $),ADR(SUB$),LEN(SUB$))
ZD 270 ? :? "POSITION OF SUB$ WITHIN MAIN
   $: X=";X:IF  NOT X THEN ? :? " NO MATC
H FOUND ":GOTO 300
LO 280 ? :? "MAIN$(";X;",";X-1+LEN(SUB$);
   ")=";CHR$(34);MAIN$(X,X-1+LEN(SUB$));C
   HR$(34)
HJ 290 FOR I=1 TO LEN(SUB$):SUB$(I,I)=CHR
   $(ASC(SUB$(I,I))+128):NEXT I:MAIN$(X,X
   -1+LEN(SUB$))=SUB$
TU 300 POSITION 0,22:? L$;" START  RUN
    SELECT  PRINT MAIN$[ESC,BELL]";
KL 310 I=PEEK(53279):IF I=5 THEN POKE 82,
   0:? "[ESC,CLEAR]";MAIN$:POKE 82,2:? :G
   OTO 300
XN 320 ON PEEK(53279)<>6 GOTO 310:RUN
RW 330 REM  Data
RN 340 DATA AMAC ASSEMBLER,ANTIC,ATARI,BA
   SIC,CLASSIC,DISK DRIVE,DOS2.5,FLOPPY D
   ISK,MODEM,MONITOR,NOSAUG,OPTION
NY 350 DATA PAGE 6,POKEY,POLE POSITION,PR
   INTER,RESET,SELECT,STAR RAIDERS,START,
   TURBO,TWAUG,8 BIT,130XE,800XL,1050
```

Underline = INVERSE CHARACTERS · [ ] = CONTROL + CHARACTER · < > = INVERSE CONTROL + CHARACTER


```
UA 10 REM ****************************
CV 20 REM *         INSTRING         *
AI 30 REM *   MACHINE CODE ROUTINE   *
UQ 40 REM * CHARACTER STRING WRITER  *
NK 50 REM * BY JOHN FOSKETT   JAN'97 *
UF 60 REM ****************************
FI 70 GRAPHICS 0:POKE 16,64:POKE 53774,64
   :DIM F$(14):F$="D:STRING.LST"
KF 80 POKE 752,1:? :? "CHARACTER STRING W
   RITER":? :? "PRESS START TO BEGIN"
PT 90 ON PEEK(53279)<>6 GOTO 90:? :? "WRI
   TING TO DISK - PLEASE WAIT":RESTORE :O
   PEN #1,8,0,F$
WM 100 REM  Write MC String
PV 110 I=1:? #1;"110IN$=";CHR$(34);
BL 120 READ J:IF J<0 THEN 160
MN 130 IF I=101 THEN ? #1;CHR$(34):? #1;"
   120IN$(101)=";CHR$(34);
OB 140 ? #1;CHR$(J);:I=I+1:GOTO 120
BU 150 REM  End
HB 160 ? #1;CHR$(34):CLOSE #1:? :? "FILE
   WRITTEN IN THE LIST FORMAT":? :? "FILE
    NAME: ";F$(3);"[ESC,BELL]":END
EG 170 REM  Machine Code String Data
TD 180 DATA 104,104,133,204,104,133,203,1
   04,141,79,2,104,141,78,2,104,133,206,1
   04,133,205,104,104,141,80,2,173,78,2
OZ 190 DATA 56,237,80,2,141,81,2,173,79,2
   ,233,0,141,82,2,238,81,2,173,81,2,208,
   3,238,82,2,169,0,141,83,2,141,84,2
CI 200 DATA 238,83,2,173,83,2,208,3,238,8
   4,2,162,0,160,0,177,203,209,205,208,1,
   232,200,204,80,2,208,243,236,80,2,240
BV 210 DATA 44,238,203,165,203,208,2,238,
   204,206,81,2,173,81,2,201,255,208,3,20
   6,82,2,173,81,2,208,197,173,82,2,208
JB 220 DATA 192,169,0,133,212,141,88,2,13
   3,213,141,89,2,96,173,83,2,133,212,141
   ,88,2,173,84,2,133,213,141,89,2,96,-1
```

Underline = INVERSE CHARACTERS · [ ] = CONTROL + CHARACTER · < > = INVERSE CONTROL + CHARACTER

HOW THE ROUTINE WORKS

The four parameters are first removed from the stack, which are the addresses and the lengths of the two strings. The addresses are stored in the zero page locations 203/204 (MNADDLO/MNADDHI) and 205/206 (SBADDLO/SBADDHI) for MAIN$ and SUB$ respectively. The length of MAIN$ is stored in locations 590/591 (MLENGLO/MLENGHI) and the length of SUB$ is stored in location 592 (SUBLENG), only a single location being necessary for SUB$ since its maximum length is 256 bytes.

The next step is to subtract the length of SUB$ from the length of MAIN$ and then add one which is the maximum number of positions that SUB$ could occupy within MAIN$ and the result is stored in locations 593/594 (STEPSLO/STEPSHI).

The position counter locations 595/596 (COUNTLO/COUNTHI) are zeroed before entering the main loop. Within the loop the X and Y registers are zeroed before any of the elements of SUB$ are compared with the corresponding elements of MAIN$. Each of the corresponding elements are compared using indirect indexed addressing in the sub-loop identified by the label LOOP and if any are found to match, then the X register is incremented. After comparing each element, the Y register is incremented and compared with the length of SUB$ and if not equal, the loop is repeated until all the elements of SUB$ has been compared to those of MAIN$. When the contents of the Y register is equal to the length of SUB$, that is when all the elements of SUB$ have been compared with those of MAIN$, the X register is compared with the

length of SUB$ and if equal, a match has been found. When a match is found, the current contents of locations 595/596 are stored in locations 212 and 213 for returning to BASIC via the USR commands equating variable. If the comparison with the X register fails, then the address of MAIN$ is incremented, locations 593/594 are decremented, locations 595/596 are incremented, the X and Y registers are reset to zero and the process repeated to compare the elements of SUB$ with the new corresponding elements of MAIN$. When locations 593/594 have been decremented to zero, assuming that no match is found, then the routine is exited storing a zero in locations 212 and 213 for returning to BASIC to indicate that no match has been found.

DEMONSTRATION PROGRAM

The actual machine code routine is the string immediately below the REM header and the rest of the listing is the demonstration program.

The demonstration program begins by randomly loading MAIN$ with Atari orientated words and then loading SUB$ randomly with one of the words. The routine is then used to locate the word stored in SUB$ within MAIN$ printing the position found on screen. All but the last 4 words are loaded into MAIN$ and also because some words could be overwritten there will not always be a match found and so the routine will return a zero to BASIC. If a match has been found, then the word stored in SUB$ is converted into inverse and the value found by the routine is used to find and overwrite the word in MAIN$ with the inverse of the word now stored in SUB$. From the menu, START may be pressed to run the program again or SELECT may be pressed to print MAIN$ onto the screen where the inverse of the matched word can be seen.

COMPILER PROBLEMS

There is a small bug in the Turbo BASIC compiler which prevents the USR command from returning the correct value to BASIC via the equating variable. This problem is accommodated for within the routine by loading the position of SUB$ within MAIN$ into two locations, 600 for the low byte and 601 for the high byte. These locations can then be PEEKed and the position of SUB$ found by using the normal two byte calculations.

TYPING THE MACHINE CODE STRING

Because of the difficulty involved with typing machine code strings, the second program has been included to write the string for you from a bank of numeric data. Simply run the program and press START after which the string will be written to disk using the file name "STRING.LST" in the LIST format. It is then a simple matter to ENTER the string from disk.

SECTOR EDITOR

John Foskett presents a new disk sector editor written in Turbo Basic

A disk sector editor is a utility program for accessing a disk's data directly and therefore must be used with great care. The program presented here was written for use in conjunction with DOS 2.5 with both single and enhanced density but may easily be modified to accommodate other format configurations if required.

THE MAIN SCREEN

The main part of the main screen is where the data from the disk under examination is displayed in 8 columns of 16 rows giving a total of 128 bytes of data read from any specified sector. The columns are numbered 0 to 7 and the rows numbered 0 to 120 in steps of 8 (that is 0, 8, 16, 24, etc.) allowing easy reference to any specified byte. Above the main area of the screen is the programs title below which is a line showing the current sector number with a brief description of the sectors use followed by a line showing the link sector and byte count. "Link Sector" is the number of the next sector in a program or file following the sector currently displayed on screen and is not necessarily in numerical order. "Byte Count" is the total number of data bytes contained in a sector and is usually 125, the last 3 bytes of each sector being used by DOS. All but the last sector of a program or file will contain 125 bytes. Both the link sector and byte count are only displayed with respect to data sectors and in the case of the directory, boot and VTOC sectors, they are blanked. A menu of options is displayed on the bottom two lines of the screen.

RUNNING THE EDITOR

Initially when the program is first run, the format density of the disk under examination is prompted for which is selected by pressing either "S" or "E" for single or enhanced densi-

ty respectively. After selecting, the first directory sector (sector 361) is read and displayed on screen in decimal numeric notation along with the menu.

THE MENU

The menu consists of the following options where each option is selected by pressing the stated letter key....

<S> SCREEN (Display)

Initially when the program is run, the data is displayed in the numeric mode. This option toggles the display between the decimal numeric mode and the character mode.

<A> ALTER (Change Data)

When in the decimal numeric mode, this option allows the data on screen to be altered, but is disabled when in the character mode where this option is blanked from the menu. When this option is selected, the reference number (0 to 127) of the byte to be altered is prompted for and when the chosen number is entered, the value contained in the byte on screen is highlighted and the new value (0 to 255) is prompted for. At any time during the use of this option, ESCAPE may be pressed to exit back to the menu. Note that this option only changes the data displayed on screen and does NOT directly alter the data on the disk (see the WRITE option below).

<R> READ

This option allows any sector on the disk to be read and its data displayed on the screen. The chosen sector number is entered at the prompt and must be within the correct range, that is from 1 to 720 for a single density disk and from 1 to 1040 for an enhanced density disk. This option defaults to 361, the first directory sector if no sector number is entered. Once selected, this option may be exited without disturbing the on screen data by pressing ESCAPE.

<N> NEXT

This option allows the next sector in numeric sequence to be read and when selected, "Y" must be pressed to continue or any other key to exit back to the menu. If this option is selected when the last sector on the disk is currently displayed on screen, then the message "No more sectors on the disk" is printed on screen and ESCAPE must be pressed to exit.

<L> LINK

This option allows the next sector (the link sector) of a specific program or file to be displayed on screen. This option functions in the same way as the "NEXT" option above. If this option is selected when the last sector of a specific program or file is displayed on screen then the message "End of file (EOF) has been reached" is printed on screen and ESCAPE must be pressed to exit.

<C> COPY

This option allows the data from one sector which is the data currently displayed on screen to be copied or written to another sector. When selected, the number of the destination sector to receive the data is prompted for which must be within the correct range. Note that this option does not actually write to the destination sector itself, but sets the program up for writing to the destination sector when the "WRITE" option is selected.

<D> DIR

When selected and after pressing "Y" to continue, the entire directory is read from disk, stored in RAM and displayed using a special screen. This option displays the whole directory, all 64 entries whether or not they are used, deleted or open in 4 screens with each screen displaying 16 filenames. Along with the filenames, the total number of sectors used in each file, the starting sector and the files status is displayed. Triangular brackets are used in conjunction with locked and unlocked files in the same way as DOS 2.5 to indicate those files which are not accessible to DOS 2.0s. From each screen START must be pressed to continue or OPTION is pressed to exit back to the menu. When exiting from this option, the last displayed sector is re-read and once again displayed on screen.

<M> MEMORY

A memory is provided to store the data of a sector should it be necessary perhaps for backup purposes whilst the on screen data is being modified. Each of the following three options requires "Y" to be pressed to continue or any key to exit. When selected, the following sub-menu is displayed....

<C> CLEAR MEMORY

Clears the memory of all data. If this option is selected when there is no data in the memory then the message "No data in memory" is printed on screen and ESCAPE must be pressed to exit.

<R> RESTORE FROM MEMORY

Reads the data from memory and prints it upon the screen overwriting the data previously displayed.

<S> SAVE TO MEMORY

Saves the data currently on screen into the memory.

<W> WRITE

This is the only option which writes to the disk. When selected, this option allows the data currently displayed on screen to be written to the disk and the screen colour is changed to red to show that this potentially hazardous option has been selected. After selecting this option, "Y" must be pressed to continue after which the data is written to the disk.

<F> FILL

Provides a means of filling a sector with a specific character or filling a sector with a random sequence of characters. After selecting this option, either "S" or "R" must be pressed to continue. Pressing "S" allows a specific character to be used which is then prompted for, whilst pressing "R" allows a random set of characters to be used. Note that if a random set of characters are selected, the final byte of the sector (the byte count) will be set to 125 in the normal way. Whichever option is selected, the data currently on screen will be overwritten accordingly.

<V> VTOC

Allows the VTOC sector (or sectors) to be displayed on screen. If a single density disk is being examined then "Y" must be pressed to allow access to the disks VTOC sector 360. If an enhanced density disk is being examined, then the required VTOC sector is prompted for by selecting either "1" to select the first VTOC sector 360 or "2" to select the second (enhanced) VTOC sector 1024.

<P> PEEK (Read Disk)

Allows each sector of a disk to be read in sequence starting from a specified sector which is prompted for after first selecting this option. Any alpha-numeric data that the sectors may contain is printed on a special screen. This option will continue reading the disk until the last sector has been reached after which the message "No more sectors on disk" is printed on screen and ESCAPE must be pressed to exit. At any time whilst the disk is being read, HELP may be pressed to halt the reading temporarily and a sub-menu is

displayed from where START is pressed to continue or OPTION is pressed to exit. Exiting from this option re-displays the main screen showing the first directory sector.

<ESC> EXIT
Pressing ESCAPE from the main menu allows exit back to the initial screen from where the format density of a disk is selected by pressing "S" for single density or "E" for enhanced density. After selecting the format density, the first directory sector is read and displayed as before.

TECHNICAL DETAILS

THE DISPLAY LISTS

The program uses three custom display lists stored in page 6, the first for the main screen, the second for displaying the directory and the third for PEEKing (reading) the disk. Each display list in turn is defined as U$ and is loaded into page 6 at addresses 1536, 1575 and 1625 respectively by using MOVE. All three display lists allow for an extra line (a 25th line) at the top of the screen to carry the programs title. The extra line uses SCR$ for its screen RAM whose address is loaded into the display lists using DPOKE immediately after loading into page 6.

DISK ACCESS

The program uses the computer's internal routines for accessing the disk using a small machine code routine (Z$). The cassette buffer "CASBUF" at address 1021 is used to store the data read from the disk. The address of CASBUF is loaded into the vector address DBUFLO/HI at locations 772/773 during the programs initialising. DUNIT at location 769 is POKEd with a 1 during the programs initialising to enable access to disk drive number 1, POKEing DUNIT with 2 would enable access to drive 2, etc. Vector address DAUX1/2 at locations 778/779 is POKEd with the sector number to be accessed which is achieved at various places within the listing. The only other location which has to be set up is DCOMND at location 770 which is used to determine the direction of data transfer. DCOMND is POKEd with 82 to enable the disk read function and with 80 or 87 for a disk write function (87 enabling write with verify). DCOMND is POKEd with 82 during the programs initialising and is only POKEd with 87 in the WRITE procedure to enable the write function after which it is immediately returned to 82.

LISTING BREAKDOWN

One way of understanding how programs work is to examine their variables....

THE PROCEDURES

ALTER	Alters or changes data
BEEP	The beep (not key click)
CLEAR	Clears the auxiliary data from the screen
CLICK	The key click
CLRSEC	Clears the sector data from the screen
CMEM	Clears the memory
CONTINUE	Holds the screen until a key is pressed (see variable SURE). "Y" is pressed to continue or any other key to exit
COPY	Copies one sector to another
CURSOR	Positions the cursor (player 0) for the INPUT routine
DIR	Reads and displays the disks directory
EXIT	Holds the screen until ESCAPE is pressed
FILL	Fills the screen display randomly or with any single value
GETSEC	Gets the sector data from disk and prints it on screen
INIT	The initialising routine
INPUT	Input routine for entering numeric data such as the sector numbers and values
IPSUB	Input subroutine, for the INPUT procedure
LINK	Reads the link sector
MEMORY	Accesses the internal memory
MSCREEN	Prints the main menu onto the screen
NEXT	Reads the next sector in numeric sequence
PEEK	Peeks or reads the disk
PRINTBYTE	Prints the sector data on screen as decimal numeric data
PRTDATA	Prints the sector data on screen as characters
READ	Reads a sector
RESET	Resets the screen colours used within the WRITE procedure
RMEM	Restores the screen data from the memory
SHORT	Prepares short hand notation for printing on screen (that is st, nd, rd and th)
SMEM	Saves current on screen data into memory
VTOC	Gets the VTOC sector(s)
WRITE	Writes the data on screen to the disk

THE ONE LINE LABEL

MENU	References the start of the main menu for printing it onto the screen

THE STRINGS

CL$	Machine code routine for clearing the player stripe (much faster than a FOR-NEXT loop)
CLHD1$ CLHD2$	Strings of spaces for clearing the auxiliary data
DEN$	The selected format density of the disk, defined as either "SINGLE" or "ENHANCED"
E$	Defined as "ESCAPE EXIT"
FN$ FE$	The file name and extension respectively used in the DIR procedure
I$	Stores numeric data used in the INPUT procedure
L$	Defined as overline (CONTROL-N)
MEM$	The internal memory
NUM$	Stores the inverse byte value used in the ALTER procedure
RD$	Defined as "READING SECTOR"
S$	String of 31 spaces
SEC$	Stores the whole directory used in the DIR procedure
SL$	String of 39 spaces
SCR$	Screen RAM for the extra (25th) line at the top of the screen
SCR1$	Main heading titles, loaded into SCR$ as required
SCR2$	Sub-title, loaded into SCR$ as required
U$	General purpose utility string
USE$	Defined as "FREE" or "IN USE" for the MEMORY procedure
VBI$	The VBI routine defined as a character string
Z$	Machine code routine for accessing the computers internal disk access routines via the USR command

THE MAJOR VARIABLES

BEEP	Stores either a zero or a one and is used in the BEEP procedure. Zero disables the beep whilst a one enables it
BYTE	Stores the value contained in the byte WHICH used in the ALTER procedure
CUR	Horizontal position of the cursor used in the INPUT procedure
KEY	ASCII code of the last key pressed from the menu and from other prompts
LINK	Stores the link sector calculated from the on screen data
MEM	Stores either a zero or a one and is used in the memory procedures
CMEM SMEM	Zero represents a free memory whilst a one represents a used memory
MAX	Stores the maximum number of characters that can be enter in the INPUT procedure
NBYTE	New contents for the byte WHICH used in the ALTER procedure
NUM	Stores the total number of sectors on the disk, either 720 or 1040
PBYTE	Equals NBYTE for printing data onto the screen via the PRINTBYTE procedure
PMB PMBASE	Used for setting up PMGs to use "Player 0" as a cursor
POS	Used in the INPUT procedure to calculate the horizontal position the cursor
RH RV	Horizontal and vertical position for each byte of data when printing it onto the screen
SCREEN	Stores either a zero or a one. Zero enables the decimal numeric display whilst a one enables the character display
SEC	Stores the sector number for access or to be accessed
SECTORS	Number of sectors used in each file in the directory and is used in the DIR procedure
START	Starting sector of each file in the directory and is used in the DIR procedure
STAT	The status of each file in the directory and is used in the DIR procedure
SURE	Stores either a zero or a one and is used in the CONTINUE procedure. SURE equals one only if the "Y" key is pressed which is achieved by using the logic statement "SURE=(KEY=89)"
TWICE	Stores either a one or a zero and is used in the DIR procedure to enable two sectors to be printed onto the screen
WHICH	Stores the number of the byte to be altered (0 to 127) in the ALTER procedure
XX YY	Stores the horizontal and vertical positions for the cursor in the INPUT procedure

Many of the programs constants are replaced with variables to preserve memory, they are preceded with the letter "N" and their values do not vary. These variable constants are easily recognisable in the listing because they comprise of the value they represent preceded by the letter "N", thus N4=4, N5=5, N6=6, etc.

THE LISTING

DISK SECTOR EDITOR is too long to include in the magazine as a type-in listing and is therefore on this issue's disk ready to run. For those who would prefer to type in the listing a fully TYPO coded printed listing is available on request. See inside back cover for details.

BUY WINDOWS - OR ELSE!

Some comments on a new HP colour printer by Gordon F. Hooper

As your semi-official Harbinger of Doom reporter, I would like to announce that the world has now officially gone to Hell in a handbasket. If you don't have Windows 95, you can't buy a new printer.

WHAT??

That's right. I recently went to buy a new colour printer, and because I had such good service from my Hewlett Packard (HP) DeskJet 500, I wanted another HP. A friend had recently bought an HP DeskJet 660C, and it did all that I wanted my printer to do, but I could find only one for sale, and it was priced just $20 cheaper than the new HP DeskJet 680C. This did some things the 660C didn't do, so I laid down enough coin of the realm to purchase it.

Now the fun began. When I had it set up, I was surprised to see there were only two control buttons on the front - an On/Off switch and a Pause switch. Even my mono DeskJet 500 had more. Upon checking the manual (which in itself is the poorest excuse for documentation I have ever seen), I discovered that all the printers features were controlled by software which was included in the box on four floppies. The software only ran under DOS version 3.3 or later, Windows 3.1 or Windows 95. In other words, buy a Bill Gates-controlled DOS box or forget about acquiring a new printer!

To be fair, Hewlett Packard do make a model called the HP DeskWriter 680C which has software for Macs, but all other computers are left urinating into the ocean. If you don't have an IBM or Mac, your money is no good and HP doesn't want it.

I AIN'T GONNA BE BEAT!

So did I swallow my good sense and buy an I Burn Money machine? Of course not. I made the 680C work with my Mega4 STE, as all

good Atarians will do.

Even before this latest nonsense, printers (along with modems) caused the greatest amount of problems with computers. Any computer. One good thing about the 680C is that there are no DIP switches which have to be set by the user. DIP switches cause so much trouble, they must have been another attack on poor computer users by Bill Gates.

When I bought my DeskJet 500, my only computer was an eight-bit 130XE. All I wanted it to do was print out manuscripts to send to magazines, but the 8-bit was dead before inkjet printers even came out. So I did the only sensible thing and bought a case of beer and invited John Picken to my computer room. Thank God for user groups.

After testing the beer to make sure it worked properly, John looked at the manual. This manual was well written and contained much that was necessary, but John determined he would have to have the technical reference manual before he could write a printer driver. After it arrived and John perused it (plus drank a few more beers), I had a printer driver which, after setting 16 DIP switches on the printer, worked perfectly.

Then I bought my STE. I feared Molson's would be reporting record profits that quarter, but it turned out there were drivers for every program I used and Molson's stocks went into a mini-decline instead. Then I bought the 680C.

DO BUTTONS COST TOO MUCH NOW?

My DeskJet 500 had many switches on its front panel which controlled on/off, which fonts it printed, whether it printed in letter quality or draft, form feed, envelope switch and online switch. The 680C has the aforementioned two, and everything else is controlled by DOS software. Envelope printing is no problem, you can either use labels or a DTP program which prints in landscape mode directly onto the envelope. Banner printing, one of the advertised features of the 680C, would require a program written for whichever computer you have.

BUT DO I NEED THE FEATURES?

I had banner printing capabilities with my Roland 9 pin, but I only printed one banner to see how it worked, and never did it again. Not too important in the real world, in other words. Also, I never used the different font capabilities of the printer, as it was easier to change fonts by using software, and I don't do anything the hard way. Using different fonts by pushing switches on the printer also requires changing margins, line lengths and page lengths. I recommend the KISS strategy; Keep It Simple, Stupid. Most modern word processor software and all DTP software for the Atari offers different fonts and is simple to use, so use it. Being stupid about computers myself, I heartily recommend this method.

WELL, IT'S OK

Lest you think I'm against this printer, it does give laser-quality colour printing at a reasonable price. It also has a separate cartridge for black ink which gives superior black than mixing CYM colours to make it. The only objection I have to this printer is HP trying to force everyone to use Windows. ●

The CLASSIC PD ZONE

by Kevin Cooke

In this issue of the Classic PD Zone, I'll be dealing with some of the many letters I've received from readers asking for help with their Atari 8-bit relationships. My first letter is from a Mr Hugh Moore. He writes:

"Dear Kevin,

I just can't understand what's happened with me and my Atari 8-bit. I used to get on so well with it but, now, we hardly ever see each other. What can I do?"

Well, Mr Moore, the solution is obvious. I bet you haven't bought your Atari anything for a long, long time, right? Well, rectify that mistake straight away! I realise it may be hard thinking of something to buy and so, for this issue only, I'll make a couple of suggestions to help ease that tension. Read on!

HOW MANY GAMES?

THEY'RE COMING (#148) contains 15, yes 15, games!

The first is ***Deathzone***, a clone of Paul Woakes' classic game, Encounter. The game is extremely colourful and the animation is smooth. Overall, well worth a look! (70%). Next game on the disk is ***Troll War***. In comparison to Deathzone, this game is poor. It's okay for a quick blast (shoot the trolls before they get to your side of the screen) but it won't hold your interest for long (45%).

Blast is a variation on the classic Galaxians game, and a fun one at that! Graphics are simple but the game is great fun to play. A good game (75%). ***Battle In The B-Ring*** is a strange shoot 'em up which allows simultaneous two-player play, however I couldn't work out what you actually had to do!!! I'm sure it's a good game if you know what to do but in this state, it's a graphically-good, dull game! (20%).

Cosmic Defender is a brilliant little shoot 'em up. Graphics are simple, yet again, but the gameplay is marvellous (75%). ***Shooting Stars*** has you trying to keep a robot from touching the stars that bounce around the screen. Gameplay get's hectic at times and, as such, becomes extremely addictive. Another good game! (76%).

Bonk is a fabulous little maze game which involves you collecting gold bullion bars whilst avoiding baddies. Sprite movement is smooth and the graphics are fine. Another great game (81%). ***Clash Of The Kings*** is an Archon-type game. Obviously it's not as good as Archon (but then again, what is?!!) but it's good for two players. Worth a look (67%).

Incoming is a *brilliant* shoot 'em up. You control a gun which you have to rotate to shoot-down helicopters, space shuttles, etc. which fly overhead. These drop building blocks and men which create towers either-side of your gun. When you can't defend yourself any more, the game ends. This game is great fun! (87%).

Maze War is perhaps my favourite two-player PD game (better than "Capture The Flag", Stuart!!!). Basically, you wander around a destroyable maze, shooting a second player's man and/or computer controlled men. You can select the speed at which the computer-controlled people move, and the number of them (between 1 and 4). The first one to score 100 points wins! An *excellent* game! (90%).

Syntron is a clone of Robotron 2084. Graphics are average (although not much worse than in Robotron!), as is sound, but the game is good fun to play (70%).

Elevator Repairman is an unusual game. Your task is to get the repairman to the top of the elevator shaft to fix the elevators which have gone wrong. However, the stairs which get you to the top are positioned alternatively either side of the screen so that you have to dodge elevators to get from one side of the screen to the other. Music is good (the same tune as in "Spy Hunter") and the graphics deserve a mention. This one is addictive! (75%).

Tron is based upon the film of the same name. You are required to cause the other light cycles to crash by blocking them off or forcing them into a wall. This is an average version of a game that has been done many times before but, it has to be said, it's still addictive! (67%).

Cobra is a clone of the commercial game, Nibbler. That said, the two are virtually identical (apart from Cobra's complete lack of sound). If this doesn't bother you though, you'll find a good game in Cobra (70%).

Finally, **Subs** is a shoot 'em up involving, funnily enough, submarines! A good game, but it can get extremely repetitive after a couple of goes (68%).

Overall, apart from a couple of duds, this disk is well worth the asking price, if only for the excellent Maze War, Bonk, Incoming and Cosmic Defender.

THAT'S JUST DANDY!

You probably haven't heard of ***DANDY DUNGEONS*** (#73), but have you heard of Gauntlet? If so, you may be interested to hear that Gauntlet was actually based on Dandy Dungeons.

There are a few main differences between the two games, the first being the graphics. Dandy Dungeons features far larger characters than Gauntlet. The characters which you control (up to four) are made up of their appropriate number, with arms and legs sticking out.

The object of the game is simply to find the exit which takes you onto the next level. On your way, you must collect keys to open doors, kill any of the three types of monster that you encounter, etc. The weakest monster is the "Marshmallow Man" who only requires one shot to be killed, The "Smiley Faces" require two shots and the "Evil Fridges" require three shots! Each time you shoot a monster, it turns into the next weakest monster. If the monster is a marshmallow man, it simply disappears when shot. Each monster does damage if they touch you, "fridges" doing the most damage and "marshmallow men" doing the least!

Up to two players can simultaneously take part, each controlling either one or two players with the same joystick (this sounds difficult but it's fairly easy once you get the hang of it). Food and smart bombs can be collected as you go along and up to nine can be stored for later use. Believe me, on some levels you'll need them! Should you be playing with someone else and either they or you get killed, hearts liberally scattered around the game regenerate the dead player when shot at - a thoughtful touch.

Dandy Dungeons is a great game. Although the graphics and sounds are far simpler than in Gauntlet, Dandy Dungeons really does win hands-down every time on playability.

Dandy Dungeons even has a level creator so that you can make your own levels should you complete the 26 provided.

This has to be THE best-value PD game available (Megablast excepted!). Don't miss this one, whatever you do!

AND THERE'S MORE!

So you've managed to fight your way through the 26 provided levels and haven't got the time or talent to create any more? Well, help is at hand!

DANDY DUNGEON LEVELS AND TETRIS (#185) contains 26 more levels, created by your's truly! The levels are generally more varied than the original levels although some do, perhaps, suffer from having too many bonus items provided. However, if you're addicted, you'll enjoy this! [Note that these levels require the original Dandy Dungeon game to be used].

Also on the disk are two more games - ***Tetris*** and ***Whipping Top***. Tetris is a fairly good implementation of the by now well-known game. Graphics are simple but gameplay is as good as ever. The only let down is the almost total lack of sound. A musical tune or the odd sound effect wouldn't have gone amiss! Other than that, it's certainly worth a play if you have a hi-fi to provide music close at hand.

Whipping Top is an unashamed Spindizzy clone. Although the graphics are excellent on this game, the controls are so unresponsive that the spinning top in question doesn't move until at least a second after you want it to. This causes you to constantly die when it's not actually your fault! This lets down what could otherwise have been an extremely promising game.

Overall, this disk is good value if you fancy a few more levels for Dandy Dungeons, perhaps worth it if you are only interested in Tetris, but not worth it simply for Whipping Top alone!

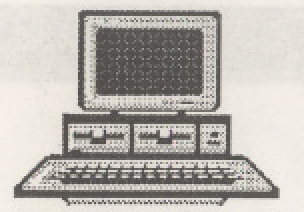
ARE THEY ANY GOOD?!!

THEY'RE COMING (#148) 85%
(Most games are great fun, some are excellent!).

DANDY DUNGEONS (#73) 90%
(A great game, better than Gauntlet!).

DANDY DUNGEON LEVELS & TETRIS 80%
(sure to keep you occupied for a while but only if you liked Dandy Dungeons!).

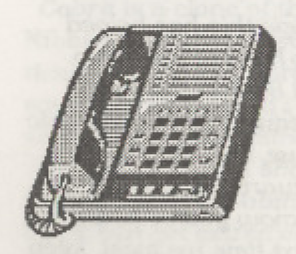
So, Mr Hugh Moore, I hope this has helped you! If any other readers have relationship problems with their Atari 8-bit, write in and give us all a laugh... I mean write in and I'll do my best to help! Next issue, the Atari World's favourite agony uncle, Stuart Murray, will be back in this spot (yes, I know you've heard that before!). So, until next time we meet, keep computing!



JOURNEY INTO CYBERSPACE

John S Davison explores the Internet and goes ....

In Search of Atari



In our last little foray into cyberspace we explored Atari related material available inside one of the large proprietary on-line services, namely CompuServe. From here on we'll be venturing out to look for Atari material on the Internet itself, starting in this issue with the Internet newsgroups. We looked at the concepts behind newsgroups in issue 74, so I won't go into them in detail again here, but as a reminder newsgroups are public places on the Internet where you can post messages and any user with newsgroup access can read them and post replies. In other words, it's like a giant collection of global bulletin boards.

To access a newsgroup you need a newsgroup reader. Most Internet service providers offer some form of software for this - in my case CompuServe provide software that automatically links in with WinCIM, their standard PC communications access package. It allows you to access newsgroups, search for topics of interest, read relevant items, reply to selected items, and post your own material to chosen newsgroups. There's also an ASCII newsgroup reader available on CompuServe, and what's more it will work via an ASCII terminal program running on an Atari.

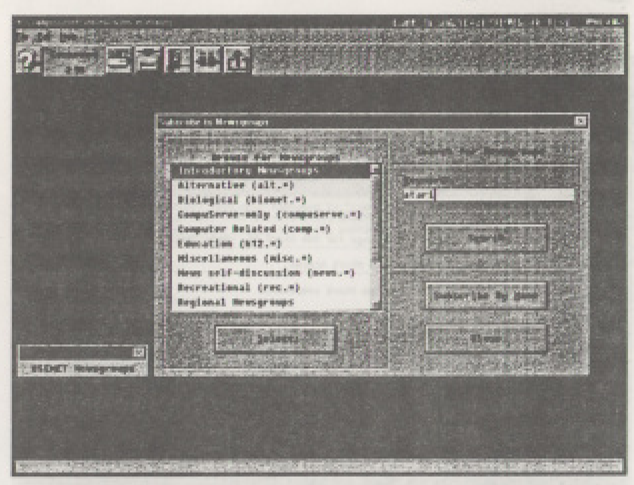
There are around 12,000 newsgroups in total so the first job is to locate those of interest to you. Your Internet service provider will have a server machine providing newsgroup access, but may not make all 12,000 available. It depends how many he elected to carry as part of his service. There's a newsgroup search facility available, so you don't have to look through the whole list to find your favourite topics.

The newsgroup name is the usual starting point, as it usually gives a reasonable indication of the newsgroup's main topic (but not always!). A search using "Atari" as the keyword provided 52 hits on the CompuServe system - that's 52 different newsgroups with the word "Atari" somewhere in their name. The next step is to sift through them all to determine those most likely to meet your needs. The first skim through was easy - about half of them were German language newsgroups, so could be eliminated (unless you understand German, of course!). You may be able to eliminate others based on the name. Then you can take a closer look at what's left.

SPAMMING AND FLAMING

It's worth remembering that newsgroups are publicly accessible on a world-wide basis, so you're going to encounter some rubbish amongst the material you examine. Disappointingly, the first newsgroup I looked at proves the point. Newsgroup "abg.atari" contained nothing of specific interest to Atari users - most of the postings were of the "junk mail" variety, advertising the sort of get-rich-quick schemes sadly now all too prevalent on the Internet. Widespread posting of such useless and irrelevant material is known as "spamming" in Netspeak, and at one time such activities just wouldn't have been tolerated at all. Spammers would find themselves the focus of severe reaction from other users, but they seem to be getting away with it more often now. More on this anon.

The next few newsgroups I tried were much more interesting. "alt.atari-jaguar.discussion", as you'd guess, is a discussion group for Atari Jaguar gaming fans. It contained a series of threads on various Jaguar related topics, plus a few junk postings of the type mentioned above. Incredibly, there was also a public APOLOGY from someone who'd obviously been spamming on this newsgroup in the recent past. His original junk posting was no longer visible, but it was clear that the regular bona-fide subscribers had got very upset and the perpetrator was still smarting from their reactions. It seems he'd been bombarded with abusive e-mail from angry users (known as "flaming" in Netspeak), and had obviously taken it all to heart. I suspect most spammers couldn't care less about getting flamed - especially if they're making money out of their questionable business schemes - but this guy seemed genuinely sorry for the trouble he'd caused.



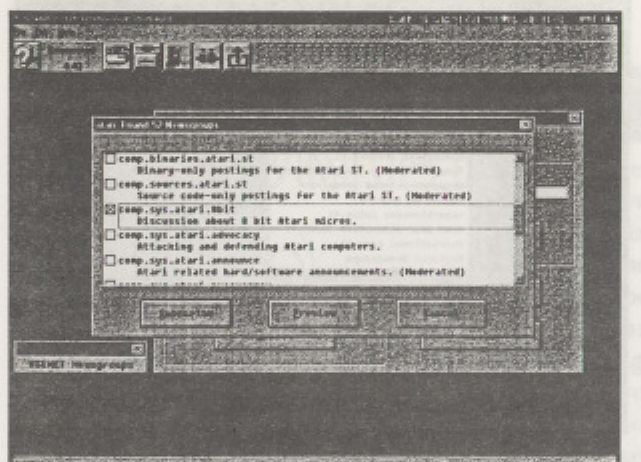
Searching for Atari newsgroups

"alt.games.lynx" is the place where Atari Lynx users gather. There were only five threads here when I checked, and most of them seemed to be concerned with the buying, selling, and swapping of Lynx games. There was also some discussion on which were the best Lynx games.

FAQS AND FIGURES

One of the most popular areas seems to be "comp.sys.atari.8bit", judging from the number of threads listed. One was a "Welcome" message aimed at new users, and this contained references to other important sources of Atari 8-bit specific information. Included were pointers to lists of Atari related vendors and developers; bulletin boards supporting Atari 8-bit; FAQ's (Frequently Asked Questions) for Atari hardware, modifications, add-ons, and emulators; and other 8-bit facts and figures. The general postings covered all man-





Browsing the list of 52 Atari related newsgroups

ner of topics, including speech synthesisers; hard drives; file manager software for MyDOS and SpartaDOS; running 8-bit programs under emulation; and even a query from someone asking if Page 6/New Atari User was still being published! I added my response to the rather terse answer already given by someone else, supplying details of where to obtain it. Looks like this is the place to come to get answers to any 8-bit queries you might have, or to help support fellow Atari enthusiasts around the world.

Programming enthusiasts have their own newsgroup called "comp.sys.atari.programmer", which covers all Atari programming, not just 8-bit. The first thread I accessed here didn't look promising. It was a plaintive cry from a user saying that this newsgroup seems to have died, as there hadn't been much activity on it for awhile. However, there did seem to be numerous recent postings proving this wasn't the case. Topics covered various technical aspects of programming, such as how to communicate with the SCSI port on a Falcon; how to convert between different implementations of the C programming language; and solving problems in getting an ST to communicate with the World Wide Web. Again, when you visit this newsgroup you may also be able to help others solve their problems - it's easy to jump in and add your contribution to current discussions.

If you enjoy debating about why Atari computers are better than others, then "comp.sys.atari.advocacy" is the place to go. Here you can praise the Atari's advantages as much as you like and you'll always find someone to support or disagree with you. One particular recent argument concerned the merits of using an Atari Falcon versus an Apple Macintosh for running the Cubase Audio music application. There are advocacy newsgroups for other makes of computer too, so you can visit them and carry your pro-Atari arguments to their home ground. It can get quite entertaining, if you enjoy making controversial statements. Watch you don't get flamed by rampant Amiga fans, though!

ATARI VAPOURWARE

Newsgroups for the 16-bit machines seem to be better supported than their 8-bit equivalents, judging by the number of postings I saw during my research for this article. "comp.sys.atari.st" appears to be the main newsgroup - there were over 60 threads active the last time I accessed it. As you'd expect there was a really wide range of discussion - typical topics were: software to use to set up an Atari bulletin board; differences between using an Atari TT and a PC running Windows 95; and a long posting from an Atari support company listing the hardware and software they have available. This company also had some very rare Atari collectors items - they've apparently acquired examples of Atari "vapourware", i.e. products that Atari (and others) developed but never got round to marketing. These included an "expansion box" for the 800XL, and a twin floppy disk drive unit using 3 inch disks (yes, that's 3 inch, not 3.5 inch!). Presumably the items were prototypes or pre-production models that never got further than the development labs.

Another amusing posting was from a guy who'd just bought a 1040ST for $10 and a matching Atari monitor for $4.50 from a junk shop somewhere in the USA. He wanted information about the system so he could start using it. Users pointed him at lots of available information held in various places on the Internet to help get him up and running.

ST fans interested in technical hardware and software projects should visit "comp.sys.atari.st.tech". Typical threads included discussions on how to use a PC VGA monitor with Atari systems; interfacing non-Atari floppy disk drives with an Atari ST; where to find a replacement mouse; and (again!) solving software problems encountered when trying to connect an ST to the World Wide Web.

One disappointment was that a number of newsgroups produced only a message saying "this newsgroup is currently unavailable" when I tried to access them. I revisited them over a period of a week and got the same response. These included "comp.sys.atari.announce", "comp.binaries.atari.st", "comp.sources.atari.st", and "alt.crews.atari". The first is supposed to contain announcements of interest to Atari fans, the second and third are for program materials in binary and source code form respectively, and the last one is the meeting place for the programming crews that bring you those fabulous demonstration programs that push the hardware to its absolute limits.

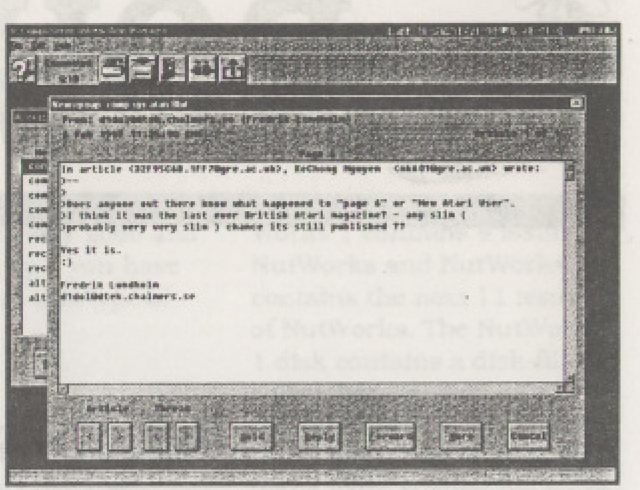
LURKING AROUND

Once you've located newsgroups of interest, you'll probably want to "lurk" on them and monitor their activity for awhile. ("Lurking" is Netspeak for hanging around just reading the posted material, without actively contributing anything of your own.) Then, having decided on the ones you like, you can "subscribe" to them and participate in the discussions there. If you don't want to actively participate you can remain a permanent lurker if you wish - there's no rule saying you HAVE to contribute to a newsgroup. In fact, no-one can even tell you're there.

Incidentally, "subscribing" just means you become a regular user - there's no financial implication, so it doesn't mean you have to pay a subscription charge. Newsgroups to which you subscribe are added to a special access list in your newsgroup reader, allowing you to go straight to them without having to search for them first. In some systems you can be automatically alerted via e-mail when new material is added to your chosen newsgroups.

The newsgroups I accessed contained many references to other sources of Atari material. These were scattered around the Internet, in other newsgroups, FTP sites, and World Wide Web sites. I'll be following up some of these in future articles, so join me again soon to find out what they have to offer. ●

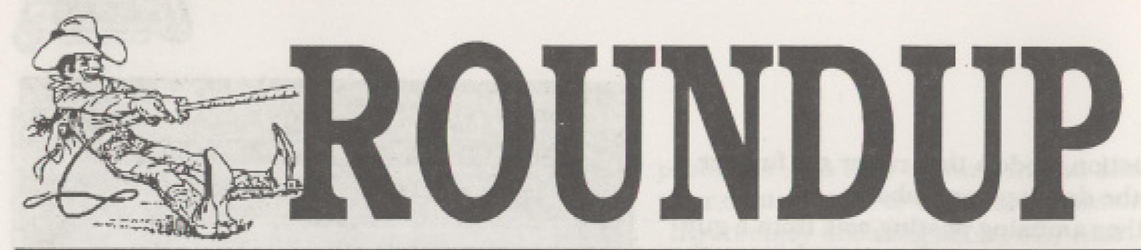




Reading the Page 6 item on comp.sys.atari.8bit about Page 6

See page 4 for the latest NAU Internet Contact list

ST PUBLIC DOMAIN ROUNDUP



Deja Vu? Well, um, yes, it does appear to be that way! Stuart's been too tied up to do this issue's column again so I've stepped in to take over for the last time. This column is going to be a sort of "make it up as you go along" job so I can't tell you at present what's going to be reviewed in it. You'll just have to wait and see I guess!

by Kevin Cooke

ROUND? WHAT KIND OF SHAPE IS THAT FOR A TABLE?

Arthur Of The Britons (ST872) is an arcade/strategy-type game, written in STOS by Ralph Effemey.

Once you have loaded the appropriate file from the disk, a colourful and fairly impressive title screen appears. From here, after a short tune, the main game loads. The object of AOTB appears to be to conquer the kingdom by fighting, collaborating with other rulers, etc.

The game starts off by presenting you with an almost bird's-eye-view of part of the land in which you can travel. A flag, constantly seen waving in the wind, marks your position on the map whilst various objects on the map represent places which you can visit. There are mines (of the "gold" rather than the "land" variety - this is the middle ages!), villages, other ruler's castles, food shooting areas, etc. By moving your army onto one of these landmarks, the screen changes to a picture or sub-game, representing that landmark.

Gameplay is made harder by your needing to keep a constant eye on food, water and crossbow-bolt supplies. Food and water are rapidly used up to feed your hungry army with every move whilst crossbow-bolts are soon depleted every time you enter a fight. Of course, you can buy more soldiers and supplies from villages (if they will trade with you) but you have to bear in mind that more soldiers use up more food and water.

Each of the sub-games are generally well-done. The gold mines present you with a man pushing a wheelbarrow who can be moved left and right using the mouse buttons to catch the falling gold. However, above you is a computer-controlled opposing miner who is also rushing for the gold.

The "shoot for food" game has you trying to shot down birds that fly across the screen. However, you have to shoot quite a distance ahead in their flight-path as your arrows take a while to travel the distance and reach them - no machine guns or lazers here!

You may also have to defend a village, of attack a castle, both of which involve you shooting several enemy soldiers who regularly pop-up from the ramparts. Again, all control is by mouse.

AOTB is generally a very good game. The graphics are particularly good for a PD game and the range of simple but fun sub-games is excellent. The author appears to have put a lot of work into this game and it seems to have paid off.

Minor niggles include the fact that the flag which marks your position can sometimes obscure other landmarks, meaning that sometimes you walk into a sub-game which you really didn't want to play. Another niggle is that to move from one map section to another, you have to move your army into an arrow. However, you can walk onto the arrow (or think that you have) only to find that you actually haven't! After trying to do this several times, your food and water supplies can be unfairly depleted.

Overall though, Author Of The Britons is very good and well worth a try if you have any interest in this type of game.

HAVING A LAUGH!

NutWorks 1 (ST116) and ***NutWorks 2*** (ST117) are a collection of amusing and cynical articles, jokes and real-life stories, seemingly all from the good ol' US of A!

The first file on NutWorks 1 says "Although it is not intended that the contents of NutWorks deal strictly with computer related themes, it is inevitable that most of the featured articles will, indeed, be computer related for blatantly obvious reasons. The rest, of course, will deal with sex". Articles include "how to tell real-men and programmers from quiche-eaters and twelve year olds", the theory that "light bulbs are dark-suckers", and a look at IBM's famous practice of "intentionally leaving pages blank"! If you enjoy this type of humour (which about 90% of the readership probably does!) then you will enjoy these disks.

It should be noted that NutWorks 1 contains 9 issues of NutWorks and NutWorks 2 contains the next 11 issues of NutWorks. The NutWorks 1 disk contains a disk-filler called "Manyboink", very similar to the Fujibonk demo reviewed last issue but with many more smaller balls - in fact, between 2 and 96 balls! The NutWorks 2 disk also contains two fun little games and a demo called Starfield 2.

The NutWorks disks describe themselves as "The Electronic Humour Magazines". They are certainly unique and, if you need cheering-up or enjoy a good laugh, they're well worth a try!

One last thing - some of the articles on these disks are aimed at adults and "young adults" and so aren't really suitable for young children. You've been warned!

I HEARD IT THROUGH THE GRAPEVINE!

The California Raisins (ST447) is an extremely short (15 seconds) sound and graphics demo. However, it's an impressive one nonetheless.

The demo simply shows four "California Raisins" singing and dancing along to the song, "I heard it through the grapevine" (I was going to attempt to name the original artists but then I remembered that I'm a "young 'un" - what do I care?!!). The four raisins are very large and extremely well animated/ shaded (perhaps digitised from an original source?) - in fact, it looks as if you're watching them on TV. The sound sample playing along is also very clear but is let down because it only lasts for 15 seconds. The program does give you the option of watching the demo once, or of watching it in a loop, but due to the short length of the tune the loop option doesn't improve it much.

Despite this, the California Raisins demo is still worth a watch and will always come in useful for showing off to your friends!

WATCH THAT CAT!

Finally we have ***Tom and Jerry*** (ST573), a cartoon-style animated demo lasting for a minute and three quarters (that's more like it!). I'm undecided about whether the graphics are hand-drawn or digitised (probably a bit of both) but whichever, the quality is excellent!

Sounds which definitely have been digitised from the cartoon play along in the background to great effect.

Animation and graphics are very good throughout - it's so good, your children are sure to think it's real TV!

Tom and Jerry is definitely a disk to have in your collection, again, if only to show your friends!

THAT'S ALL FOLKS!

I was going to finish off by saying that Stuart will be back by the time you've finished all of your left-over Christmas Turkey but, on second thoughts, I hope he's back before the year 2027!!! Anyway, I hope that you had a good Christmas - here's to a wonderful 1997 for the Atari!

ROUNDUP RATINGS:

ARTHUR OF THE BRITONS (ST872) 79%
(good fun, shame about the minor faults).

NUTWORKS 1 79%
(a good laugh, but it get's better...)

NUTWORKS 2 86%
(just slightly more amusing than NutWorks 1... and more issues on this disk!)

CALIFORNIA RAISINS 72%
(what there is of it is excellent... it's just a shame there wasn't more)

TOM AND JERRY 88%
(an excellent demo of what your ST is capable of)

contact ... contact ... contact ...

FOR SALE

8-BIT ITEMS: 800XL, £25; 1050 disk drive, £25; Touch Tablet with AtariArtist software, £20; all plus p&p or £65 for all three inc. postage. Also software from 30p tapes, £2 disks. For list write to Mr D. Loughton, 34, Collindale Avenue, Erith, Kent DA8 1EE

SOFTWARE: Atari 8-bit software: original games on ROM, disk and cassette. Prices from 25p. Write for list to Paul, 17 Spring Road, Clifton, Shefford, Beds. SG17 5RE

ST SOFTWARE: Various ST software from 50p; Mag cover disks (PC/Amiga), 10 for £1.50 inc. postage or 25 for £3. 1 Meg 30 pin Sims, £5. For list write to Mr D. Loughton, 34, Collindale Avenue, Erith, Kent DA8 1EE

FOR SALE

800/400 SYSTEMS: 800XL computer, 1050 disk drive, 1010 program recorder, 400 'Maplins' 48k upgrade, 410 program recorder, power supplies, leads, manuals, joysticks/paddles, ROMs, disks, tapes, magazines 1981 to present day. Excellent condition - in storage for several years. £150.00, no splits, no offers, buyer collects. Steve Campbell 01753 536707 (Slough, Berks)

XE SYSTEM: 130XE computer with 2 PSU's, £40; 1050 disk drive with PSU, £30; 1027 printer, £35. All in original boxes with manuals, handbooks. 800 computer, 850 interface, XC12 cassette, £30 the 3, all OK. Will accept £125 for the lot. Tel. J. Barnes 01229 584466 (Cumbria)

FOR SALE

BOOK: Computer Animation Primer - the ultimate Byte book about Atari graphics. Excellent condition. Offers please to Paul, 17 Spring Road, Clifton, Shefford, Beds. SG17 5RE

WANTED

ATARIWRITER/DRIVE: AtariWriter ROM cartridge wanted, also 8-bit disk drive. Swap 65XE (faulty keyboard) or old PC or cash. M Tomlin, 26, Malyons, Felmores, Basildon, Essex SS13 1PJ. Tel. 01268 554991

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CONTACT, PAGE 6 PUBLISHING, STAFFORD, ST16 1DR

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PROGRAM LISTINGS

Certain program listings which are too long to include in the magazine may be obtained free of charge as printed listings to type in. All programs are, however, included on the Issue Disk which is available with each issue. Remember this disk also includes BONUS PROGRAMS which do not appear in the magazine. If you would like the type-in listings please write or telephone indicating which listings you require. Please note that there are not necessarily extra listings for every magazine.

Write to LISTINGS, NEW ATARI USER, P.O. BOX 54, STAFFORD, ST16 1DR or telephone 01785 241153